Basis SMEFTsim_general (EFT SMEFT)

Basis used in the SMEFTsim_general UFO models, version 3.0.0 or later. Implements Warsaw basis with generic flavor indices for all fermions. q,u,d are the left- and right-handed quark fields. ℓ,e are left- and right-handed lepton fields. Quark fields are in the up-aligned basis. This basis definition corresponds to a fixed LambdaSMEFT=1e+3 in the UFO models. Notation and conventions can vary compared to the Warsaw basis paper, see arXiv:2012.11343 for all definitions.

Sectors

The effective Lagrangian is defined as

$$\mathcal{L}_{\text{eff}} = -\mathcal{H}_{\text{eff}} = \sum_{O_i = O_i^{\dagger}} C_i O_i + \sum_{O_i \neq O_i^{\dagger}} \left(C_i O_i + C_i^* O_i^{\dagger} \right).$$

dB=dL=0

| WC name | Operator | Type |
|---------|--|--------------|
| cG | $f^{ABC}G^{A\nu}_{\mu}G^{B\rho}_{\nu}G^{C\mu}_{\rho}/\text{TeV}^2$ | R |
| cGtil | $f^{ABC}\widetilde{G}^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ ho}/{ m TeV}^2$ | R |
| cW | $arepsilon^{IJK}W_{\mu}^{I u}W_{ u}^{J ho}W_{ ho}^{K\mu}/{ m TeV}^2$ | R |
| cWtil | $arepsilon^{IJK}\widetilde{W}_{\mu}^{I u}W_{ u}^{J ho}W_{ ho}^{K\mu}/{ m TeV}^2$ | R |
| сН | $(H^{\dagger}H)^3/\text{TeV}^2$ | R |
| cHbox | $(H^{\dagger}H)\square(H^{\dagger}H)/\text{TeV}^2$ | R |
| cHDD | $(D_{\mu}H^{\dagger}H)(H^{\dagger}D^{\mu}H)/\text{TeV}^2$ | R |
| cHG | $G_{\mu\nu}^{A}G^{A\mu\nu}H^{\dagger}H/\text{TeV}^{2}$ | R |
| cHGtil | $\widetilde{G}^{A}_{\mu u}G^{A\mu u}H^{\dagger}H/\mathrm{TeV}^{2}$ | R |
| cHW | $\dot{W_{\mu\nu}^I}W^{I\mu u}H^\dagger H/{ m TeV^2}$ | R |
| cHWtil | $\widetilde{W}^{I}_{\mu u}W^{I\mu u}H^{\dagger}H/\mathrm{TeV}^{2}$ | R |
| сНВ | $B_{\mu u}^{\mu u}B^{\mu u}H^{\dagger}H/\text{TeV}^2$ | R |
| cHBtil | $\widetilde{B}_{\mu u}B^{\mu u}H^{\dagger}H/\mathrm{TeV}^{2}$ | R |
| cHWB | $B_{\mu\nu}W^{I\mu\nu}H^{\dagger}\sigma^{I}H/\text{TeV}^{2}$ | R |
| cHWBtil | $B_{\mu\nu}\widetilde{W}^{I\mu\nu}H^{\dagger}\sigma^{I}H/\text{TeV}^{2}$ | R |
| ceHRe11 | $(\bar{\ell}_1 H e_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHRe22 | $(\bar{\ell}_2 H e_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHRe33 | $(\bar{\ell}_3 H e_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHRe12 | $(\bar{\ell}_1 H e_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHRe13 | $(\bar{\ell}_1 H e_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHRe21 | $(\bar{\ell}_2 H e_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHRe23 | $(\bar{\ell}_2 H e_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHRe31 | $(\bar{\ell}_3 H e_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHRe32 | $(\bar{\ell}_3 H e_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHIm11 | $i(\bar{\ell}_1 H e_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |

| WC name | Operator | Type |
|---------|--|--------------|
| ceHIm22 | $i(\bar{\ell}_2 H e_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHIm33 | $i(\bar{\ell}_3 H e_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceHIm12 | $i(\bar{\ell}_1 H e_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceHIm13 | $i(\bar{\ell}_1 H e_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHIm21 | $i(\bar{\ell}_2 H e_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceHIm23 | $i(\bar{\ell}_2 H e_3)(H^\dagger H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceHIm31 | $i(\bar{\ell}_3 H e_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceHIm32 | $i(\bar{\ell}_3 H e_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuHRe11 | $(\bar{q}_1 \tilde{H} u_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuHRe22 | $(\bar{q}_2 \tilde{H} u_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHRe33 | $(\bar{q}_3 \tilde{H} u_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHRe12 | $(\bar{q}_1 \tilde{H} u_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHRe13 | $(\bar{q}_1 \tilde{H} u_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHRe21 | $(\bar{q}_2\tilde{H}u_1)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHRe23 | $(\bar{q}_2 \tilde{H} u_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHRe31 | $(\bar{q}_3 \tilde{H} u_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHRe32 | $(\bar{q}_3 \tilde{H} u_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuHIm11 | $i(\bar{q}_1 \tilde{H} u_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuHIm22 | $i(\bar{q}_2\tilde{H}u_2)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHIm33 | $i(\bar{q}_3\tilde{H}u_3)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuHIm12 | $i(\bar{q}_1 \tilde{H} u_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuHIm13 | $i(\bar{q}_1 \tilde{H} u_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuHIm21 | $i(\bar{q}_2\tilde{H}u_1)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuHIm23 | $i(\bar{q}_2\tilde{H}u_3)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHIm31 | $i(\bar{q}_3\tilde{H}u_1)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuHIm32 | $i(\bar{q}_3\tilde{H}u_2)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cdHRe11 | $(\bar{q}_1 H d_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHRe22 | $(\bar{q}_2 H d_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHRe33 | $(\bar{q}_3 H d_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHRe12 | $(\bar{q}_1 H d_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHRe13 | $(\bar{q}_1 H d_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdHRe21 | $(\bar{q}_2 H d_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHRe23 | $(\bar{q}_2 H d_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHRe31 | $(\bar{q}_3 H d_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHRe32 | $(\bar{q}_3Hd_2)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHIm11 | $i(\bar{q}_1 H d_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHIm22 | $i(\bar{q}_2 H d_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHIm33 | $i(\bar{q}_3 H d_3)(H^{\dagger} H)/\text{TeV}_2^2 + \text{h.c.}$ | R |
| cdHIm12 | $i(\bar{q}_1 H d_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdHIm13 | $i(\bar{q}_1 H d_3)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| cdHIm21 | $i(\bar{q}_2 H d_1)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdHIm23 | $i(\bar{q}_2Hd_3)(H^{\dagger}H)/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|---------|---|--------------|
| cdHIm31 | $i(\bar{q}_3Hd_1)(H^\dagger H)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cdHIm32 | $i(\bar{q}_3 H d_2)(H^{\dagger} H)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceWRe11 | $(\bar{\ell}_1 \sigma^I H \sigma^{\mu\nu} e_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceWRe22 | $(\bar{\ell}_2 \sigma^I H \sigma^{\mu\nu} e_2) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceWRe33 | $(\bar{\ell}_3 \sigma^I H \sigma^{\mu\nu} e_3) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceWRe12 | $(\ell_1 \sigma^I H \sigma^{\mu\nu} e_2) W_{\mu\nu}^I / \text{TeV}^2 + \text{h.c.}$ | R |
| ceWRe13 | $\begin{array}{l} (\bar{\ell}_{1}\sigma^{I}H\sigma^{\mu\nu}e_{3})W_{\mu\nu}^{I}/\text{TeV}^{2} + \text{h.c.} \\ (\bar{\ell}_{2}\sigma^{I}H\sigma^{\mu\nu}e_{1})W_{\mu\nu}^{I}/\text{TeV}^{2} + \text{h.c.} \\ (\bar{\ell}_{2}\sigma^{I}H\sigma^{\mu\nu}e_{3})W_{\mu\nu}^{I}/\text{TeV}^{2} + \text{h.c.} \\ (\bar{\ell}_{2}\sigma^{I}H\sigma^{\mu\nu}e_{3})W_{\mu\nu}^{I}/\text{TeV}^{2} + \text{h.c.} \end{array}$ | R |
| ceWRe21 | $(\bar{\ell}_2 \sigma^I H \sigma^{\mu\nu} e_1) \dot{W}^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceWRe23 | $(\bar{\ell}_2 \sigma^I H \sigma^{\mu\nu} e_3) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceWRe31 | $(\bar{\ell}_3 \sigma^I H \sigma^{\mu\nu} e_1) W_{\mu\nu}^I / \text{TeV}^2 + \text{h.c.}$ | R |
| ceWRe32 | $(\bar{\ell}_3 \sigma^I H \sigma^{\mu\nu} e_2) W_{\mu\nu}^I / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceWIm11 | $i(\bar{\ell}_1 \sigma^I H \sigma^{\mu\nu} e_1) W^I_{\cdots} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceWIm22 | $i(\bar{\ell}_2\sigma^I H \sigma^{\mu\nu} e_2) W^I / \text{TeV}^2 + \text{h.c.}$ | R |
| ceWIm33 | $i(\ell_2\sigma^1 H \sigma^{\mu\nu} e_2)W^1/\text{TeV}^2 + \text{h.c.}$ | R |
| ceWIm12 | $i(\bar{\ell}_1\sigma^I H \sigma^{\mu\nu} e_2) W_{\mu\nu}^{II}/\text{TeV}^2 + \text{h.c.}$ | R |
| ceWIm13 | $i(\bar{\ell}_1\sigma^I H \sigma^{\mu\nu} e_2) W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $i(\bar{\ell}_1\sigma^I H \sigma^{\mu\nu} e_3) W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $i(\bar{\ell}_2\sigma^I H \sigma^{\mu\nu} e_1) W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $i(\bar{\ell}_2\sigma^I H \sigma^{\mu\nu} e_1) W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| ceWIm21 | $i(\bar{\ell}_2\sigma^I H \sigma^{\mu\nu} e_1) W_{\mu\nu}^{II} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceWIm23 | $i(\bar{\ell}_2\sigma^I H \sigma^{\mu\nu} e_3) W_{\mu\nu}^{II}/\text{TeV}^2 + \text{h.c.}$ | R |
| ceWIm31 | $i(\bar{\ell}_3\sigma^I H \sigma^{\mu\nu} e_1)W^{\mu\nu}_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| ceWIm32 | $i(\bar{\ell}_3 \sigma^I H \sigma^{\mu\nu} e_2) W_{\mu\nu}^{I} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBRe11 | $(\bar{\ell}_1 H \sigma^{\mu\nu} e_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBRe22 | $(\bar{\ell}_2 H \sigma^{\mu\nu} e_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBRe33 | $(\bar{\ell}_3 H \sigma^{\mu\nu} e_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBRe12 | $(\bar{\ell}_1 H \sigma^{\mu\nu} e_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBRe13 | $(\bar{\ell}_1 H \sigma^{\mu\nu} e_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBRe21 | $(\bar{\ell}_2 H \sigma^{\mu\nu} e_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBRe23 | $(\bar{\ell}_2 H \sigma^{\mu\nu} e_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBRe31 | $(\bar{\ell}_3 H \sigma^{\mu\nu} e_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceBRe32 | $(\bar{\ell}_3 H \sigma^{\mu\nu} e_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceBIm11 | $i(\bar{\ell}_1 H \sigma^{\mu\nu} e_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceBIm22 | $i(\bar{\ell}_2 H \sigma^{\mu\nu} e_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceBIm33 | $i(\bar{\ell}_3 H \sigma^{\mu\nu} e_3) B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| ceBIm12 | $i(\bar{\ell}_1 H \sigma^{\mu\nu} e_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceBIm13 | $i(\bar{\ell}_1 H \sigma^{\mu\nu} e_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceBIm21 | $i(\bar{\ell}_2 H \sigma^{\mu\nu} e_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBIm23 | $i(\bar{\ell}_2 H \sigma^{\mu\nu} e_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| ceBIm31 | $i(\bar{\ell}_3 H \sigma^{\mu\nu} e_1) B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| ceBIm32 | $i(\bar{\ell}_3 H \sigma^{\mu\nu} e_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuGRe11 | $(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} T^A u_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuGRe22 | $(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} T^A u_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $(\bar{q}_2 \tilde{H} \sigma^{\mu\nu} T^A u_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuGRe33 | $(\bar{q}_3 H \sigma^{\mu\nu} T^A u_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuGRe12 | $(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} T^A u_2) G_{\mu\nu}^{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|---------|--|--------------|
| cuGRe13 | $(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} T^A u_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuGRe21 | $(\bar{q}_2 \tilde{H} \sigma^{\mu\nu} T^A u_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuGRe23 | $(\bar{q}_2 \tilde{H} \sigma^{\mu\nu} T^A u_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuGRe31 | $(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} T^A u_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuGRe32 | $(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} T^A u_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuGIm11 | $(\bar{q}_{1}\tilde{H}\sigma^{\mu\nu}T^{A}u_{1})G^{A}_{\mu\nu}/\text{TeV}^{2} + \text{h.c.}$ $(\bar{q}_{2}\tilde{H}\sigma^{\mu\nu}T^{A}u_{1})G^{A}_{\mu\nu}/\text{TeV}^{2} + \text{h.c.}$ $(\bar{q}_{3}\tilde{H}\sigma^{\mu\nu}T^{A}u_{1})G^{A}_{\mu\nu}/\text{TeV}^{2} + \text{h.c.}$ $(\bar{q}_{3}\tilde{H}\sigma^{\mu\nu}T^{A}u_{1})G^{A}_{\mu\nu}/\text{TeV}^{2} + \text{h.c.}$ $(\bar{q}_{3}\tilde{H}\sigma^{\mu\nu}T^{A}u_{2})G^{A}_{\mu\nu}/\text{TeV}^{2} + \text{h.c.}$ $i(\bar{q}_{1}\tilde{H}\sigma^{\mu\nu}T^{A}u_{1})G^{A}_{\mu\nu}/\text{TeV}^{2} + \text{h.c.}$ $i(\bar{q}_{2}\tilde{H}\sigma^{\mu\nu}T^{A}u_{2})G^{A}_{\mu\nu}/\text{TeV}^{2} + \text{h.c.}$ $i(\bar{q}_{2}\tilde{H}\sigma^{\mu\nu}T^{A}u_{2})G^{A}_{\mu\nu}/\text{TeV}^{2} + \text{h.c.}$ | R |
| cuGIm22 | $i(\bar{q}_2\tilde{H}\sigma^{\mu\nu}T^Au_2)G^A_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuGIm33 | $t(q_3 110^{\circ} 1 u_3)G_{\mu\nu}/10^{\circ} + \text{n.c.}$ | R |
| cuGIm12 | $i(\bar{q}_1 H \sigma^{\mu\nu} T^A u_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuGIm13 | $i(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} T^A u_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuGIm21 | $i(\bar{q}_2 H \sigma^{\mu\nu} T^A u_1) G^A / \text{TeV}^2 + \text{h.c.}$ | R |
| cuGIm23 | $i(\bar{q}_2\tilde{H}\sigma^{\mu\nu}T^Au_3)G^A_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuGIm31 | $i(\bar{q}_2 \tilde{H} \sigma^{\mu\nu} T^A u_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} T^A u_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} T^A u_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} u_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuGIm32 | $i(\bar{q}_3 H \sigma^{\mu\nu} T^A u_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuWRe11 | $(\bar{q}_1 \sigma^I \tilde{H} \sigma^{\mu\nu} u_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuWRe22 | $(q_2\sigma^2 H \sigma^{\mu\nu} u_2) W_{\mu\nu}^2 / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuWRe33 | $(\bar{q}_3 \sigma^I \tilde{H} \sigma^{\mu\nu} u_3) W_{\mu\nu}^I / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuWRe12 | $(\bar{q}_1 \sigma^I \tilde{H} \sigma^{\mu\nu} u_2) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuWRe13 | $(\bar{q}_1 \sigma^I \tilde{H} \sigma^{\mu\nu} u_3) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuWRe21 | $(\bar{q}_2 \sigma^I \tilde{H} \sigma^{\mu\nu} u_1) W_{\mu\nu}^{I} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuWRe23 | $(\bar{q}_2\sigma^I\tilde{H}\sigma^{\mu\nu}u_3)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $(\bar{q}_3\sigma^I\tilde{H}\sigma^{\mu\nu}u_1)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $(\bar{q}_3\sigma^I\tilde{H}\sigma^{\mu\nu}u_2)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $(\bar{q}_3\sigma^I\tilde{H}\sigma^{\mu\nu}u_2)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuWRe31 | $(\bar{q}_3 \sigma^I H \sigma^{\mu\nu} u_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuWRe32 | $(\bar{q}_3 \sigma^1 H \sigma^{\mu\nu} u_2) W^1_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm11 | $i(\bar{q}_1\sigma^1 H\sigma^{\mu\nu}u_1)W^1_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm22 | $i(\bar{q}_2\sigma^I\tilde{H}\sigma^{\mu\nu}u_2)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm33 | $i(\bar{q}_3\sigma^I\tilde{H}\sigma^{\mu\nu}u_3)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm12 | $i(\bar{q}_1\sigma^I\tilde{H}\sigma^{\mu\nu}u_2)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm13 | $i(\bar{q}_1\sigma^I\tilde{H}\sigma^{\mu\nu}u_3)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm21 | $i(\bar{q}_2\sigma^I H \sigma^{\mu\nu} u_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm23 | $i(\bar{q}_2\sigma^I\tilde{H}\sigma^{\mu\nu}u_1)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_2\sigma^I\tilde{H}\sigma^{\mu\nu}u_3)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_3\sigma^I\tilde{H}\sigma^{\mu\nu}u_1)W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm31 | $i(\bar{q}_3\sigma^I H \sigma^{\mu\nu} u_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuWIm32 | $i(q_3\sigma^1 H \sigma^{\mu\nu} u_2) W_{\mu\nu}^1 / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe11 | $(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} u_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe22 | $(\bar{q}_2 \tilde{H} \sigma^{\mu\nu} u_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe33 | $(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} u_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe12 | $(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} u_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe13 | $(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} u_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe21 | $(\bar{q}_2 \tilde{H} \sigma^{\mu\nu} u_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe23 | $(\bar{q}_2 \tilde{H} \sigma^{\mu\nu} u_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe31 | $(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} u_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBRe32 | $(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} u_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|---------|--|--------------|
| cuBIm11 | $i(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} u_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cuBIm22 | $i(\bar{q}_2 \tilde{H} \sigma^{\mu\nu} u_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBIm33 | $i(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} u_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBIm12 | $i(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} u_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cuBIm13 | $i(\bar{q}_1 \tilde{H} \sigma^{\mu\nu} u_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuBIm21 | $i(\bar{q}_2\tilde{H}\sigma^{\mu\nu}u_1)B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuBIm23 | $i(\bar{q}_2\tilde{H}\sigma^{\mu\nu}u_3)B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuBIm31 | $i(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} u_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuBIm32 | $i(\bar{q}_3 \tilde{H} \sigma^{\mu\nu} u_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdGRe11 | $(\bar{q}_1 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdGRe22 | $(\bar{q}_2 H \sigma^{\mu\nu} T^A d_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdGRe33 | $(\bar{q}_3 H \sigma^{\mu\nu} T^A d_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdGRe12 | $(\bar{q}_1 H \sigma^{\mu\nu} T^A d_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdGRe13 | $(\bar{q}_1 H \sigma^{\mu\nu} T^A d_3) G_{}^A / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdGRe21 | $(\bar{q}_2 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdGRe23 | $(\bar{q}_2 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $(\bar{q}_2 H \sigma^{\mu\nu} T^A d_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $(\bar{q}_3 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $(\bar{q}_3 H \sigma^{\mu\nu} T^A d_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGRe31 | $(\bar{q}_3 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGRe32 | $(\bar{q}_3 H \sigma^{\mu\nu} T^A d_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGIm11 | $i(\bar{q}_1 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGIm22 | $i(\bar{q}_2 H \sigma^{\mu\nu} T^A d_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGIm33 | $i(\bar{q}_3 H \sigma^{\mu\nu} T^A d_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGIm12 | $i(\bar{q}_1 H \sigma^{\mu\nu} T^A d_2) G^A_{} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGIm13 | $i(\bar{q}_1 H \sigma^{\mu\nu} T^A d_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_2 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_2 H \sigma^{\mu\nu} T^A d_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_3 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_3 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGIm21 | $i(\bar{q}_2 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdGIm23 | $i(\bar{q}_2 H \sigma^{\mu\nu} T^A d_3) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGIm31 | $i(\bar{q}_3 H \sigma^{\mu\nu} T^A d_1) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdGIm32 | $i(\bar{q}_3 H \sigma^{\mu\nu} T^A d_2) G^A_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $(\bar{q}_1 \sigma^I H \sigma^{\mu\nu} d_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdWRe11 | $(\bar{q}_1 \sigma^I H \sigma^{\mu\nu} d_1) W^{I}_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdWRe22 | $(\bar{q}_2 \sigma^1 H \sigma^{\mu\nu} d_2) W^1_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdWRe33 | $(\bar{q}_3 \sigma^I H \sigma^{\mu\nu} d_3) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdWRe12 | $(\bar{q}_1 \sigma^I H \sigma^{\mu\nu} d_2) W_{\mu\nu}^I / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdWRe13 | $(\bar{q}_1 \sigma^I H \sigma^{\mu\nu} d_3) W_{\mu\nu}^I / \text{TeV}^2 + \text{h.c.}$ $(\bar{q}_2 \sigma^I H \sigma^{\mu\nu} d_1) W_{\mu\nu}^I / \text{TeV}^2 + \text{h.c.}$ | R |
| cdWRe21 | $(\bar{q}_2\sigma^I H \sigma^{\mu\nu} d_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdWRe23 | $(\bar{q}_2 \sigma^I H \sigma^{\mu\nu} d_3) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $(\bar{q}_3 \sigma^I H \sigma^{\mu\nu} d_1) W^I_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdWRe31 | $(\bar{q}_3\sigma^I H \sigma^{\mu\nu} d_1) \dot{W}^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cdWRe32 | $(\bar{q}_3 \sigma^1 H \sigma^{\mu\nu} d_2) W^1_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdWIm11 | $i(\bar{q}_1\sigma^I H \sigma^{\mu\nu} d_1) \dot{W}^I_{\mu\nu}/{\rm TeV}^2 + {\rm h.c.}$ | R |
| cdWIm22 | $i(\bar{q}_2\sigma^I H \sigma^{\mu\nu} d_2) W_{\mu\nu}^I / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cdWIm33 | $i(\bar{q}_3\sigma^{I}H\sigma^{\mu\nu}d_3)W_{\mu\nu}^{I}/\text{TeV}^2 + \text{h.c.}$ | R |
| cdWIm12 | $i(\bar{q}_1\sigma^I H \sigma^{\mu\nu} d_2) W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cdWIm13 | $i(\bar{q}_1\sigma^I H \sigma^{\mu\nu} d_3) W_{\mu\nu}^I/\text{TeV}^2 + \text{h.c.}$ | R |
| | | |

| WC name | Operator | Type |
|--------------------|---|--------------|
| cdWIm21 | $i(\bar{q}_2\sigma^I H \sigma^{\mu\nu} d_1) W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cdWIm23 | $i(\bar{q}_{\alpha}\sigma^{I}H\sigma^{\mu\nu}d_{\alpha})W^{I}/T_{0}V^{2} \perp h.c.$ | R |
| cdWIm31 | $i(\bar{q}_{3}\sigma^{I}H\sigma^{\mu\nu}d_{1})W_{\mu\nu}^{I}/\text{TeV}^{2} + \text{h.c.}$ $i(\bar{q}_{3}\sigma^{I}H\sigma^{\mu\nu}d_{1})W_{\mu\nu}^{I}/\text{TeV}^{2} + \text{h.c.}$ $i(\bar{q}_{3}\sigma^{I}H\sigma^{\mu\nu}d_{2})W_{\mu\nu}^{I}/\text{TeV}^{2} + \text{h.c.}$ | R |
| cdWIm32 | $i(\bar{q}_3\sigma^I H \sigma^{\mu\nu} d_2) W^I_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe11 | $(\bar{q}_1 H \sigma^{\mu\nu} d_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe22 | $(\bar{q}_2 H \sigma^{\mu\nu} d_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe33 | $(\bar{q}_3 H \sigma^{\mu\nu} d_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe12 | $(\bar{q}_1 H \sigma^{\mu\nu} d_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe13 | $(\bar{q}_1 H \sigma^{\mu\nu} d_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe21 | $(\bar{q}_2 H \sigma^{\mu\nu} d_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe23 | $(\bar{q}_2 H \sigma^{\mu\nu} d_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe31 | $(\bar{q}_3 H \sigma^{\mu\nu} d_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBRe32 | $(\bar{q}_3 H \sigma^{\mu\nu} d_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBIm11 | $i(\bar{q}_1 H \sigma^{\mu\nu} d_1) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_2 H \sigma^{\mu\nu} d_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBIm22 cdBIm33 | $i(q_2 H \sigma^{\mu\nu} d_2) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_3 H \sigma^{\mu\nu} d_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R R |
| cdBIm12 | $i(q_3H\sigma^{\prime\prime} u_3)B_{\mu\nu}/\text{TeV} + \text{h.c.}$ $i(\bar{q}_1H\sigma^{\mu\nu}d_2)B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R R |
| cdBIm13 | $i(\bar{q}_1 H \sigma^{\mu\nu} d_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_1 H \sigma^{\mu\nu} d_3) B_{\mu\nu} / \text{TeV}^2 + \text{h.c.}$ | R |
| cdBIm21 | $i(q_1H\sigma^{\mu} d_3)B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ $i(\bar{q}_2H\sigma^{\mu\nu}d_1)B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cdBIm23 | $i(\overline{q}_2H\sigma^{\mu\nu}d_3)B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cdBIm31 | $i(\bar{q}_3H\sigma^{\mu\nu}d_1)B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cdBIm32 | $i(\bar{q}_3H\sigma^{\mu\nu}d_2)B_{\mu\nu}/\text{TeV}^2 + \text{h.c.}$ | R |
| cHl1Re11 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{\ell}_{1}\gamma^{\mu}\ell_{1})/\text{TeV}^{2}$ | R |
| cHl1Re22 | $(H^\dagger i \overleftrightarrow{D}_\mu H) (\bar{\ell}_2 \gamma^\mu \ell_2) / \text{TeV}^2$ | \mathbf{R} |
| cHl1Re33 | $(H^{\dagger}i\overrightarrow{D}_{,\mu}H)(\bar{\ell}_{3}\gamma^{\mu}\ell_{3})/\mathrm{TeV}^{2}$ | R |
| cHl1Re12 | $(H^{\dagger}i\overline{D}_{\mu}H)(\bar{\ell}_1\gamma^{\mu}\ell_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cHl1Re13 | $(H^{\dagger}i\overrightarrow{D}_{\mu}H)(\bar{\ell}_{1}\gamma^{\mu}\ell_{3})/\text{TeV}^{2}+\text{h.c.}$ | \mathbf{R} |
| cHl1Re23 | $(H^{\dagger}i\overrightarrow{D}_{\mu}H)(\bar{\ell}_2\gamma^{\mu}\ell_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cHl1Im12 | $i(H^{\dagger}i\overrightarrow{D}_{\mu}H)(\bar{\ell}_1\gamma^{\mu}\ell_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cHl1Im13 | $i(H^{\dagger}i\overrightarrow{D}_{\mu}H)(\bar{\ell}_1\gamma^{\mu}\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cHl1Im23 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{\ell}_{2}\gamma^{\mu}\ell_{3})/\text{TeV}^{2} + \text{h.c.}$ | \mathbf{R} |
| cHl3Re11 | $(H^{\dagger}i \overleftrightarrow{D}_{\mu}^{I} H)(\bar{\ell}_{1} \gamma^{\mu} \sigma^{I} \ell_{1})/\text{TeV}^{2} (H^{\dagger}i \overleftrightarrow{D}_{\mu}^{I} H)(\bar{\ell}_{2} \gamma^{\mu} \sigma^{I} \ell_{2})/\text{TeV}^{2}$ | R |
| cH13Re22 | $(H^{\dagger}i \overrightarrow{D}_{\mu}^{I} H)(\bar{\ell}_{2} \gamma^{\mu} \sigma^{I} \ell_{2})/\text{TeV}^{2}$ | \mathbf{R} |
| cH13Re33 | $(H^{\dagger}i \overset{\iota}{D} \overset{\iota}{I} H)(\bar{\ell}_{3} \gamma^{\mu} \sigma^{I} \ell_{3})/\text{TeV}^{2}$ $(H^{\dagger}i \overset{\iota}{D} \overset{\iota}{I} H)(\bar{\ell}_{1} \gamma^{\mu} \sigma^{I} \ell_{2})/\text{TeV}^{2} + \text{h.c.}$ $(H^{\dagger}i \overset{\iota}{D} \overset{\iota}{I} H)(\bar{\ell}_{1} \gamma^{\mu} \sigma^{I} \ell_{3})/\text{TeV}^{2} + \text{h.c.}$ | R |
| cHl3Re12 | $(H^{\dagger}i\overrightarrow{D}_{\mu}^{I}H)(\bar{\ell}_{1}\gamma^{\mu}\sigma^{I}\ell_{2})/\text{TeV}^{2}+\text{h.c.}$ | \mathbf{R} |
| cHl3Re13 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{\ell}_{1}\gamma^{\mu}\sigma^{I}\ell_{3})/\text{TeV}^{2} + \text{h.c.}$ | \mathbf{R} |
| cH13Re23 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{\ell}_{2}\gamma^{\mu}\sigma^{I}\ell_{3})/\mathrm{TeV}^{2}+\mathrm{h.c.}$ | R |
| cHl3Im12 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{\ell}_{1}\gamma^{\mu}\sigma^{I}\ell_{2})/\text{TeV}^{2}+\text{h.c.}$ | \mathbf{R} |
| cHl3Im13 | $(H^{\dagger}i \overleftrightarrow{D}_{\mu}^{I} H)(\bar{\ell}_{2} \gamma^{\mu} \sigma^{I} \ell_{3})/\text{TeV}^{2} + \text{h.c.}$ $i(H^{\dagger}i \overleftrightarrow{D}_{\mu}^{I} H)(\bar{\ell}_{1} \gamma^{\mu} \sigma^{I} \ell_{2})/\text{TeV}^{2} + \text{h.c.}$ $i(H^{\dagger}i \overleftrightarrow{D}_{\mu}^{I} H)(\bar{\ell}_{1} \gamma^{\mu} \sigma^{I} \ell_{3})/\text{TeV}^{2} + \text{h.c.}$ | R |
| cHl3Im23 | $i(H^{\dagger}i\overrightarrow{D}_{\mu}^{I}H)(\overline{\ell}_{2}\gamma^{\mu}\sigma^{I}\ell_{3})/\text{TeV}^{2} + \text{h.c.}$ | \mathbf{R} |
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| WC name | Operator | Type |
|----------|--|--------------|
| cHq1Re11 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{q}_{1}\gamma^{\mu}q_{1})/\text{TeV}^{2}$ | R |
| Hq1Re22 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{q}_{2}\gamma^{\mu}q_{2})/\mathrm{TeV}^{2}$ | R |
| Hq1Re33 | $(H^\dagger i \overleftrightarrow{D}_\mu H) (\bar{q}_3 \gamma^\mu q_3) / { m TeV}^2$ | R |
| Hq1Re12 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{q}_{1}\gamma^{\mu}q_{2})/\text{TeV}^{2}+\text{h.c.}$ | R |
| Hq1Re13 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{q}_1\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| Hq1Re23 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{q}_{2}\gamma^{\mu}q_{3})/\mathrm{TeV}^{2}+\mathrm{h.c.}$ | R |
| Hq1Im12 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{q}_1\gamma^{\mu}q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| Hq1Im13 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{q}_1\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| Hq1Im23 | $i(H^{\dagger}i\overrightarrow{D}_{\mu}H)(\bar{q}_2\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| Iq3Re11 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{1}\gamma^{\mu}\sigma^{I}q_{1})/\text{TeV}^{2}$ | R |
| Hq3Re22 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{2}\gamma^{\mu}\sigma^{I}q_{2})/\text{TeV}^{2}$ | R |
| Hq3Re33 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{3}\gamma^{\mu}\sigma^{I}q_{3})/\text{TeV}^{2}$ | R |
| Hq3Re12 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{1}\gamma^{\mu}\sigma^{I}q_{2})/\text{TeV}^{2}+\text{h.c.}$ | R |
| Iq3Re13 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{1}\gamma^{\mu}\sigma^{I}q_{3})/\text{TeV}^{2}+\text{h.c.}$ | R |
| q3Re23 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{2}\gamma^{\mu}\sigma^{I}q_{3})/\text{TeV}^{2}+\text{h.c.}$ | \mathbf{R} |
| q3Im12 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{1}\gamma^{\mu}\sigma^{I}q_{2})/\text{TeV}^{2}+\text{h.c.}$ | R |
| q3Im13 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{1}\gamma^{\mu}\sigma^{I}q_{3})/\text{TeV}^{2}+\text{h.c.}$ | \mathbf{R} |
| q3Im23 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}^{I}H)(\bar{q}_{2}\gamma^{\mu}\sigma^{I}q_{3})/\text{TeV}^{2}+\text{h.c.}$ | \mathbf{R} |
| eRe11 | $(H^\dagger i \overleftrightarrow{D}_\mu H) (\bar{e}_1 \gamma^\mu e_1) / \text{TeV}^2$ | R |
| eRe22 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{e}_{2}\gamma^{\mu}e_{2})/\mathrm{TeV}^{2}$ | R |
| eRe33 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{e}_{3}\gamma^{\mu}e_{3})/\mathrm{TeV}^{2}$ | R |
| eRe12 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{e}_1\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| eRe13 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| eRe23 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| eIm12 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{e}_1\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| eIm13 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| eIm23 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| IuRe11 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{u}_{1}\gamma^{\mu}u_{1})/\text{TeV}^{2}$ | R |
| uRe22 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{u}_{2}\gamma^{\mu}u_{2})/\text{TeV}^{2}$ | \mathbf{R} |
| uRe33 | $(H^{\dagger}i\overset{\smile}{D}_{\mu}H)(\bar{u}_{3}\gamma^{\mu}u_{3})/\text{TeV}^{2}$ | \mathbf{R} |
| uRe12 | $(H^{\dagger}iD_{\mu}H)(\bar{u}_{1}\gamma^{\mu}u_{2})/\text{TeV}^{2} + \text{h.c.}$ | R |
| uRe13 | $(H^{\dagger}i\overrightarrow{D}_{\mu}H)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| IuRe23 | $(H^{\dagger}i\overleftarrow{D}_{\mu}H)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| uIm12 | $i(H^{\dagger}i\overrightarrow{D}_{\mu}H)(\bar{u}_1\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| IuIm13 | $i(H^{\dagger}i\overleftarrow{D}_{\mu}H)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| uIm23 | $(H^{\dagger}i \overleftrightarrow{D}_{\mu}H)(\bar{u}_{1}\gamma^{\mu}u_{3})/\text{TeV}^{2} + \text{h.c.}$ $(H^{\dagger}i \overleftrightarrow{D}_{\mu}H)(\bar{u}_{1}\gamma^{\mu}u_{2})/\text{TeV}^{2} + \text{h.c.}$ $i(H^{\dagger}i \overleftrightarrow{D}_{\mu}H)(\bar{u}_{1}\gamma^{\mu}u_{2})/\text{TeV}^{2} + \text{h.c.}$ $i(H^{\dagger}i \overleftrightarrow{D}_{\mu}H)(\bar{u}_{1}\gamma^{\mu}u_{3})/\text{TeV}^{2} + \text{h.c.}$ $i(H^{\dagger}i \overleftrightarrow{D}_{\mu}H)(\bar{u}_{2}\gamma^{\mu}u_{3})/\text{TeV}^{2} + \text{h.c.}$ | R |
| dRe11 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{d}_{1}\gamma^{\mu}d_{1})/\mathrm{TeV}^{2}$ | R |
| | | |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|--|-----------|---|--------------|
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cHdRe22 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{d}_{2}\gamma^{\mu}d_{2})/\text{TeV}^{2}$ | R |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHdRe33 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{d}_{3}\gamma^{\mu}d_{3})/\text{TeV}^{2}$ | R |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHdRe12 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{d}_1\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHdRe13 | $(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{d}_1\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | cHdRe23 | | ${ m R}$ |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHdIm12 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{d}_1\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cHdIm13 | $i(H^{\dagger}i\overleftrightarrow{D}_{\mu}H)(\bar{d}_1\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHdIm23 | $i(H^{\dagger}i\overrightarrow{D}_{\mu}H)(\bar{d}_{2}\gamma^{\mu}d_{3})/\text{TeV}^{2}+\text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudRe11 | $(\tilde{H}^{\dagger}iD_{\mu}H)(\bar{u}_1\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudRe22 | $(\tilde{H}^{\dagger}iD_{\mu}H)(\bar{u}_2\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cHudRe33 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cHudRe12 | $(\tilde{H}^{\dagger}iD_{\mu}H)(\bar{u}_1\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudRe13 | $(\tilde{H}^{\dagger}iD_{\mu}H)(\bar{u}_1\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudRe21 | $(\tilde{H}^{\dagger}iD_{\mu}H)(\bar{u}_2\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudRe23 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cHudRe31 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudRe32 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudIm11 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cHudIm22 | $i(\tilde{H}^{\dagger}iD_{\mu}H)(\bar{u}_2\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cHudIm33 | $i(\tilde{H}^{\dagger}iD_{\mu}H)(\bar{u}_{3}\gamma^{\mu}d_{3})/\text{TeV}^{2} + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudIm12 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudIm13 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudIm21 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudIm23 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudIm31 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cHudIm32 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cllRe1111 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cllRe2222 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cl1Re3333 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\ell}_3\gamma^\mu\ell_3)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cllRe1122 | $(ar{\ell}_1\gamma_\mu\ell_1)(ar{\ell}_2\gamma^\mu\ell_2)/{ m TeV}^2$ | R |
| $\begin{array}{llll} \text{cl1Re1221} & & & & & & & & & & & & \\ \text{cl1Re1331} & & & & & & & & & & & \\ & & & & & & & $ | cllRe1133 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_3\gamma^\mu\ell_3)/{ m TeV}^2$ | R |
| $\begin{array}{llll} \text{cl1Re1331} & & & & & & & & & & & \\ \text{cl1Re2332} & & & & & & & & & & \\ & & & & & & & & $ | cl1Re2233 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{\ell}_3\gamma^\mu\ell_3)/{ m TeV}^2$ | R |
| $\begin{array}{llll} \text{cl1Re1331} & & & & & & & & & & & \\ \text{cl1Re2332} & & & & & & & & & & \\ & & & & & & & & $ | cllRe1221 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{\ell}_2 \gamma^\mu \ell_1)/{\rm TeV}^2$ | R |
| $\begin{array}{llll} \text{cllRe1112} & & & & & & & & & & & & & & & & & & &$ | cllRe1331 | $(\ell_1 \gamma_\mu \ell_3)(\ell_3 \gamma^\mu \ell_1)/\text{TeV}^2$ | R |
| $ \begin{array}{llll} {\rm cllRe1113} & & & & & & & & & & & & & & & & & & \\ {\rm cllRe1123} & & & & & & & & & & & & & & & & & \\ {\rm cllRe1123} & & & & & & & & & & & & & & & & \\ {\rm cllRe1212} & & & & & & & & & & & & & & & \\ {\rm cllRe1212} & & & & & & & & & & & & & & \\ {\rm cllRe1213} & & & & & & & & & & & & & & \\ {\rm cllRe1213} & & & & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & \\ {\rm rel} & & & & & & & & & & \\ {\rm rel} & & & & & & & & & \\ {\rm rel} & & & & & & & & & \\ {\rm rel} & & & & & & & & & \\ {\rm rel} & & & & & & & & \\ {\rm rel} & & & & & & & & \\ {\rm rel} & & & & & & & & \\ {\rm rel} & & & & & & & & \\ {\rm rel} & & & & & & & & \\ {\rm rel} & & & & & & & & \\ {\rm rel} & & & & & & & \\ {\rm rel} & & & & & & & \\ {\rm rel} & & & & & & & \\ {\rm rel} & & & & & & & \\ {\rm rel} & & & & & & & \\ {\rm rel} & & & & & & & \\ {\rm rel} & & & & & & & \\ {\rm rel} & & & & & & \\ {\rm rel} & & & & & & & \\ {\rm rel} & & & & & & \\ {\rm rel} & & & & & & \\ {\rm rel} & & & & & & \\ {\rm rel} & & & & & \\ {\rm rel} & & & & & & \\ {\rm rel} & & & & \\ {\rm rel} & & & & & & \\ {\rm rel} & & & & \\ {\rm rel} & & & & \\ {\rm rel} & & & & & \\ {\rm rel} & & & \\ {\rm rel} & & & \\ {\rm rel} & & & & \\ {\rm rel} & & & \\ {$ | cl1Re2332 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\ell}_3\gamma^\mu\ell_2)/{ m TeV}^2$ | R |
| $\begin{array}{lll} \text{cllRe1123} & (\bar{\ell}_{1}\gamma_{\mu}\ell_{1})(\bar{\ell}_{2}\gamma^{\mu}\ell_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cllRe1212} & (\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{\ell}_{1}\gamma^{\mu}\ell_{2})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cllRe1213} & (\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{\ell}_{1}\gamma^{\mu}\ell_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cllRe1112 | | \mathbf{R} |
| cllRe1212 $(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{\ell}_1 \gamma^{\mu} \ell_2)/\text{TeV}^2 + \text{h.c.}$ R cllRe1213 $(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{\ell}_1 \gamma^{\mu} \ell_3)/\text{TeV}^2 + \text{h.c.}$ R | cllRe1113 | | R |
| cllRe1213 $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{\ell}_1 \gamma^\mu \ell_3)/\text{TeV}^2 + \text{h.c.}$ R | cllRe1123 | | R |
| | cllRe1212 | | \mathbf{R} |
| cllRe1222 $ (\ell_1 \gamma_\mu \ell_2)(\ell_2 \gamma^\mu \ell_2)/\text{TeV}^2 + \text{h.c.} $ R | cllRe1213 | | |
| | cllRe1222 | $(\ell_1 \gamma_\mu \ell_2)(\ell_2 \gamma^\mu \ell_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |

| WC name | Operator | Type |
|------------|---|--------------|
| cllRe1232 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{\ell}_3 \gamma^\mu \ell_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllRe1233 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_3\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllRe1313 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\ell}_1\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllRe1322 | $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{\ell}_2 \gamma^\mu \ell_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllRe1323 | $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{\ell}_2 \gamma^\mu \ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllRe1333 | $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{\ell}_3 \gamma^\mu \ell_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cl1Re2223 | $(\bar{\ell}_2 \gamma_\mu \ell_2)(\bar{\ell}_2 \gamma^\mu \ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cl1Re2323 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cl1Re3323 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllRe1231 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_3\gamma^\mu\ell_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllRe1223 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllRe1332 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\ell}_3\gamma^\mu\ell_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cllIm1112 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu\ell_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1113 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1123 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1212 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_1\gamma^\mu\ell_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cllIm1213 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_1\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cllIm1222 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_2\gamma^\mu\ell_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1232 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_3\gamma^\mu\ell_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1233 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_3\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1313 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\ell}_1\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1322 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\ell}_2\gamma^\mu\ell_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1323 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cl1Im1333 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\ell}_3\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cl1Im2223 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cl1Im2323 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| c11Im3323 | $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1231 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_3\gamma^\mu\ell_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cllIm1223 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_2\gamma^\mu\ell_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cl1Im1332 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\ell}_3\gamma^\mu\ell_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq1Re1111 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_1\gamma^\mu q_1)/{ m TeV}^2$ | R |
| clq1Re1122 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_2\gamma^\mu q_2)/{ m TeV}^2$ | R |
| clq1Re1133 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_3\gamma^\mu q_3)/{ m TeV}^2$ | R |
| clq1Re2222 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{q}_2\gamma^\mu q_2)/{ m TeV}^2$ | R |
| clq1Re2233 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{q}_3\gamma^\mu q_3)/{ m TeV}^2$ | \mathbf{R} |
| clq1Re3333 | $(ar{\ell}_3\gamma_\mu\ell_3)(ar{q}_3\gamma^\mu q_3)/{ m TeV}^2$ | \mathbf{R} |
| clq1Re1221 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{q}_2 \gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Re1331 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Re2332 | $(\bar{\ell}_2 \gamma_\mu \ell_3)(\bar{q}_3 \gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Re2211 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_1)/{ m TeV}^2$ | \mathbf{R} |
| clq1Re3311 | $(\bar{\ell}_3 \gamma_\mu \ell_3)(\bar{q}_1 \gamma^\mu q_1)/\text{TeV}^2$ | \mathbf{R} |
| clq1Re3322 | $(\bar{\ell}_3 \gamma_\mu \ell_3)(\bar{q}_2 \gamma^\mu q_2)/\text{TeV}^2$ | R |
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| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|---|------------|--|----------|
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1112 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1113 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1123 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1212 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1213 | $(\bar{\ell}_1 \gamma_{\mu} \ell_2) (\bar{q}_1 \gamma^{\mu} q_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \operatorname{clq1Re1232} & & & & & & & & & & & & & & & & & & &$ | clq1Re1222 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_2\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1232 | $(\ell_1 \gamma_{\mu} \ell_2) (\bar{q}_3 \gamma^{\mu} q_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1233 | $(\ell_1 \gamma_\mu \ell_2)(\bar{q}_3 \gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1313 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1322 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1323 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clq1Re1333 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clq1Re2223 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clq1Re2323 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clq1Re3323 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clq1Re1231 | $(\bar{\ell}_1 \gamma_{\mu} \ell_2) (\bar{q}_3 \gamma^{\mu} q_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1223 | $(\bar{\ell}_1 \gamma_{\mu} \ell_2) (\bar{q}_2 \gamma^{\mu} q_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1332 | $(\ell_1 \gamma_\mu \ell_3)(\bar{q}_3 \gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1211 | $(\ell_1 \gamma_{\mu} \ell_2) (\bar{q}_1 \gamma^{\mu} q_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1311 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clq1Re1312 | $(\ell_1 \gamma_\mu \ell_3)(\bar{q}_1 \gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re1321 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clq1Re2212 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clq1Re2213 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re2311 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re2312 | $(\ell_2 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re2313 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re2321 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re2322 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re2331 | $(\ell_2 \gamma_\mu \ell_3)(\bar{q}_3 \gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re2333 | $(\ell_2 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clq1Re3312 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clq1Im1221} & & & & & & & & & & & & & & & & & & &$ | clq1Re3313 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clq1Im1331} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{q}_{3}\gamma^{\mu}q_{1})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clq1Im2332} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{3})(\bar{q}_{3}\gamma^{\mu}q_{2})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clq1Im1112} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{1})(\bar{q}_{1}\gamma^{\mu}q_{2})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clq1Im1113} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{1})(\bar{q}_{1}\gamma^{\mu}q_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clq1Im1123} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{1})(\bar{q}_{2}\gamma^{\mu}q_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clq1Im1212} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{q}_{1}\gamma^{\mu}q_{2})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clq1Im1213} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{q}_{1}\gamma^{\mu}q_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clq1Im1221 | $i(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{q}_2 \gamma^{\mu} q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{c1q1Im2332} & i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{c1q1Im1112} & i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{c1q1Im1113} & i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{c1q1Im1123} & i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{c1q1Im1212} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{c1q1Im1213} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \end{array}$ | clq1Im1331 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clq1Im1113} & & & & & & & & & & & & & & & & & & &$ | clq1Im2332 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clq1Im1113} & & & & & & & & & & & & & & & & & & &$ | clq1Im1112 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq1Im1123 $i(\bar{\ell}_1\gamma_{\mu}\ell_1)(\bar{q}_2\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ R clq1Im1212 $i(\bar{\ell}_1\gamma_{\mu}\ell_2)(\bar{q}_1\gamma^{\mu}q_2)/\text{TeV}^2 + \text{h.c.}$ R clq1Im1213 $i(\bar{\ell}_1\gamma_{\mu}\ell_2)(\bar{q}_1\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ R | clq1Im1113 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq1Im1212 $i(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{q}_1 \gamma^{\mu} q_2)/\text{TeV}^2 + \text{h.c.}$ R clq1Im1213 $i(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{q}_1 \gamma^{\mu} q_3)/\text{TeV}^2 + \text{h.c.}$ R | clq1Im1123 | $i(\bar{\ell}_1 \gamma_{\mu} \ell_1)(\bar{q}_2 \gamma^{\mu} q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq1Im1213 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ R | clq1Im1212 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq1Im1222 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_2\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ R | clq1Im1213 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| | clq1Im1222 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_2\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| WC name | Operator | Type |
|------------|---|--------------|
| clq1Im1232 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_3\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq1Im1233 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_3\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1313 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1322 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1323 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1333 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2223 | $i(\ell_2\gamma_\mu\ell_2)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2323 | $i(\ell_2\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im3323 | $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1231 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_3\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1223 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_2\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1332 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1211 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1311 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1312 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im1321 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2212 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2213 | $i(\ell_2\gamma_\mu\ell_2)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2311 | $i(\ell_2\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2312 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2313 | $i(\ell_2\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2321 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2322 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2331 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im2333 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im3312 | $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq1Im3313 | $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{q}_1\gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Re1111 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_1) (\bar{q}_1 \gamma^\mu \sigma^I q_1) / \text{TeV}^2$ | \mathbf{R} |
| clq3Re1122 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_1) (\bar{q}_2 \gamma^\mu \sigma^I q_2) / \text{TeV}^2$ | \mathbf{R} |
| clq3Re1133 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_1)(\bar{q}_3 \gamma^\mu \sigma^I q_3)/\text{TeV}^2$ | \mathbf{R} |
| clq3Re2222 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_2) (\bar{q}_2 \gamma^\mu \sigma^I q_2) / \text{TeV}^2$ | \mathbf{R} |
| clq3Re2233 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_2) (\bar{q}_3 \gamma^\mu \sigma^I q_3) / \text{TeV}^2$ | \mathbf{R} |
| clq3Re3333 | $(\bar{\ell}_3 \gamma_\mu \sigma^I \ell_3) (\bar{q}_3 \gamma^\mu \sigma^I q_3) / \text{TeV}^2$ | \mathbf{R} |
| clq3Re1221 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_2)(\bar{q}_2 \gamma^\mu \sigma^I q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Re1331 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_3)(\bar{q}_3 \gamma^\mu \sigma^I q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Re2332 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_3)(\bar{q}_3 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Re2211 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_2) (\bar{q}_1 \gamma^\mu \sigma^I q_1) / \text{TeV}^2$ | R |
| clq3Re3311 | $(\bar{\ell}_3 \gamma_\mu \sigma^I \ell_3) (\bar{q}_1 \gamma^\mu \sigma^I q_1) / \text{TeV}^2$ | R |
| clq3Re3322 | $(\bar{\ell}_3 \gamma_\mu \sigma^I \ell_3)(\bar{q}_2 \gamma^\mu \sigma^I q_2)/\text{TeV}^2$ | R |
| clq3Re1112 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_1)(\bar{q}_1 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1113 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_1)(\bar{q}_1 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1123 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_1)(\bar{q}_2 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |

| WC name | Operator | Type |
|------------|--|--------------|
| clq3Re1212 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_2)(\bar{q}_1 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1213 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_2)(\bar{q}_1 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1222 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_2)(\bar{q}_2 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1232 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_2)(\bar{q}_3 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1233 | $(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| clq3Re1313 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_3) (\bar{q}_1 \gamma^\mu \sigma^I q_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1322 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_3)(\bar{q}_2 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1323 | $(\ell_1 \gamma_\mu \sigma^I \ell_3) (\bar{q}_2 \gamma^\mu \sigma^I q_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1333 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_3)(\bar{q}_3 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re2223 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_2)(\bar{q}_2 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re2323 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_3)(\bar{q}_2 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re3323 | $(\bar{\ell}_3 \gamma_\mu \sigma^I \ell_3)(\bar{q}_2 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1231 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_2)(\bar{q}_3 \gamma^\mu \sigma^I q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1223 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_2)(\bar{q}_2 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1332 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_3)(\bar{q}_3 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Re1211 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_2)(\bar{q}_1 \gamma^\mu \sigma^I q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1311 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_3)(\bar{q}_1 \gamma^\mu \sigma^I q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re1312 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_3)(\bar{q}_1 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Re1321 | $(\bar{\ell}_1 \gamma_\mu \sigma^I \ell_3)(\bar{q}_2 \gamma^\mu \sigma^I q_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Re2212 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_2)(\bar{q}_1 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re2213 | $(\bar{\ell}_2\gamma_\mu\sigma^I\ell_2)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| clq3Re2311 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_3)(\bar{q}_1 \gamma^\mu \sigma^I q_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Re2312 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_3)(\bar{q}_1 \gamma^\mu \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re2313 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_3)(\bar{q}_1 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re2321 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_3) (\bar{q}_2 \gamma^\mu \sigma^I q_1) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Re2322 | $(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/\text{TeV}^2+\text{h.c.}$ | ${ m R}$ |
| clq3Re2331 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_3)(\bar{q}_3 \gamma^\mu \sigma^I q_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Re2333 | $(\bar{\ell}_2 \gamma_\mu \sigma^I \ell_3)(\bar{q}_3 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Re3312 | $(\bar{\ell}_3 \gamma_\mu \sigma^I \ell_3) (\bar{q}_1 \gamma^\mu \sigma^I q_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Re3313 | $(\bar{\ell}_3 \gamma_\mu \sigma^I \ell_3)(\bar{q}_1 \gamma^\mu \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im1221 | $i(\ell_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_2\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Im1331 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_3\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Im2332 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_3\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Im1112 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_1)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im1113 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_1)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Im1123 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_1)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Im1212 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Im1213 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clq3Im1222 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Im1232 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_3\gamma^\mu\sigma^Iq_2)/\text{TeV}^2+\text{h.c.}$ | R |
| clq3Im1233 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | \mathbf{R} |
| clq3Im1313 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| | | |

| WC name | Operator | Type |
|------------|--|--------------|
| clq3Im1322 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im1323 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Im1333 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Im2223 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_2)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Im2323 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Im3323 | $i(\bar{\ell}_3\gamma_\mu\sigma^I\ell_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Im1231 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_3\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Im1223 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clq3Im1332 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_3\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im1211 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_2)(\bar{q}_1\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im1311 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_1\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im1312 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im1321 | $i(\bar{\ell}_1\gamma_\mu\sigma^I\ell_3)(\bar{q}_2\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2212 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_2)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2213 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_2)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2311 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_1\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2312 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2313 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2321 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_2\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2322 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2331 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_3\gamma^\mu\sigma^Iq_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im2333 | $i(\bar{\ell}_2\gamma_\mu\sigma^I\ell_3)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| clq3Im3312 | $i(\bar{\ell}_3\gamma_\mu\sigma^I\ell_3)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| clq3Im3313 | $i(\bar{\ell}_3\gamma_\mu\sigma^I\ell_3)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq1Re1111 | $(\bar{q}_1\gamma_\mu q_1)(\bar{q}_1\gamma^\mu q_1)/{\rm TeV}^2$ | R |
| cqq1Re2222 | $(\bar{q}_2\gamma_\mu q_2)(\bar{q}_2\gamma^\mu q_2)/{ m TeV}^2$ | R |
| cqq1Re3333 | $(\bar{q}_3\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_3)/{ m TeV}^2$ | R |
| cqq1Re1122 | $(\bar{q}_1\gamma_\mu q_1)(\bar{q}_2\gamma^\mu q_2)/{ m TeV}^2$ | R |
| cqq1Re1133 | $(\bar{q}_1\gamma_\mu q_1)(\bar{q}_3\gamma^\mu q_3)/{\rm TeV}^2$ | \mathbf{R} |
| cqq1Re2233 | $(ar{q}_2\gamma_\mu q_2)(ar{q}_3\gamma^\mu q_3)/{ m TeV}^2$ | R |
| cqq1Re1221 | $(\bar{q}_1\gamma_\mu q_2)(\bar{q}_2\gamma^\mu q_1)/{ m TeV}^2$ | R |
| cqq1Re1331 | $(\bar{q}_1\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_1)/{ m TeV}^2$ | \mathbf{R} |
| cqq1Re2332 | $(\bar{q}_2\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_2)/{\rm TeV}^2$ | R |
| cqq1Re1112 | $(\bar{q}_1\gamma_\mu q_1)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq1Re1113 | $(\bar{q}_1 \gamma_{\mu} q_1)(\bar{q}_1 \gamma^{\mu} q_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqq1Re1123 | $(\bar{q}_1 \gamma_{\mu} q_1)(\bar{q}_2 \gamma^{\mu} q_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqq1Re1212 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{q}_1 \gamma^{\mu} q_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqq1Re1213 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{q}_1 \gamma^{\mu} q_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqq1Re1222 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{q}_2 \gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqq1Re1232 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{q}_3 \gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqq1Re1233 | $(\bar{q}_1\gamma_{\mu}q_2)(\bar{q}_3\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqq1Re1313 | $(\bar{q}_1\gamma_{\mu}q_3)(\bar{q}_1\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|---|------------|---|--------------|
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Re1322 | $(\bar{q}_1\gamma_\mu q_3)(\bar{q}_2\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | m R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Re1323 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{q}_2 \gamma^\mu q_3)/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Re1333 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{q}_3 \gamma^{\mu} q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Re2223 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{q}_2 \gamma^\mu q_3)/{\rm TeV}^2 + {\rm h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | | $(\bar{q}_2 \gamma_\mu q_3)(\bar{q}_2 \gamma^\mu q_3)/{\rm TeV}^2 + {\rm h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | | $(\bar{q}_3 \gamma_{\mu} q_3)(\bar{q}_2 \gamma^{\mu} q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Re1231 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{q}_3 \gamma^{\mu} q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Re1223 | $(\bar{q}_1\gamma_{\mu}q_2)(\bar{q}_2\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Re1332 | $(\bar{q}_1\gamma_{\mu}q_3)(\bar{q}_3\gamma^{\mu}q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Im1112 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{q}_1\gamma^{\mu}q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1113 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{q}_1\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1123 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{q}_2\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1212 | $i(\bar{q}_1\gamma_\mu q_2)(\bar{q}_1\gamma^\mu q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1213 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{q}_1\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Im1222 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{q}_2\gamma^{\mu}q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Im1232 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{q}_3\gamma^{\mu}q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1233 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{q}_3\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1313 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{q}_1\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1322 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{q}_2\gamma^{\mu}q_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Im1323 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{q}_2\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqq1Im1333 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{q}_3\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im2223 | $i(\bar{q}_2\gamma_{\mu}q_2)(\bar{q}_2\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im2323 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{q}_2\gamma^{\mu}q_3)/{\rm TeV}^2 + {\rm h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im3323 | $i(\bar{q}_3\gamma_{\mu}q_3)(\bar{q}_2\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lllll} {\rm cqq1Im1223} & & & & & & & & & & & & & & & & & & &$ | cqq1Im1231 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{q}_3\gamma^{\mu}q_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1223 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{q}_2\gamma^{\mu}q_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq1Im1332 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{q}_3\gamma^{\mu}q_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq3Re1111 | $(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_1\gamma^\mu\sigma^Iq_1)/\text{TeV}^2$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq3Re2222 | $(\bar{q}_2\gamma_\mu\sigma^Iq_2)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/{ m TeV}^2$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqq3Re3333 | $(\bar{q}_3\gamma_\mu\sigma^Iq_3)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/{\rm TeV}^2$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqq3Re2233} & & & & & & & & & \\ {\rm cqq3Re1221} & & & & & & & & \\ {\rm cqq3Re1221} & & & & & & & \\ {\rm cqq3Re1331} & & & & & & \\ {\rm cqq3Re1331} & & & & & & \\ {\rm cqq3Re2332} & & & & & \\ {\rm cqq3Re2332} & & & & & \\ {\rm cqq3Re1112} & & & & & \\ {\rm cqq3Re1112} & & & & & \\ {\rm cqq3Re1112} & & & & & \\ {\rm cqq3Re1113} & & & & & \\ {\rm cqq3Re1113} & & & & & \\ {\rm cqq3Re1123} & & & & & \\ {\rm cqq3Re1123} & & & & & \\ {\rm cqq3Re1123} & & & & \\ {\rm cqq3Re1212} & & & & \\ {\rm cqq3Re1213} & & & & \\ {\rm cqq3Re1212} & & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1212} & & & \\ {\rm cqq3Re1212} & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & $ | cqq3Re1122 | $(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/{\rm TeV}^2$ | R |
| $\begin{array}{llll} {\rm cqq3Re2233} & & & & & & & & & \\ {\rm cqq3Re1221} & & & & & & & & \\ {\rm cqq3Re1221} & & & & & & & \\ {\rm cqq3Re1331} & & & & & & \\ {\rm cqq3Re1331} & & & & & & \\ {\rm cqq3Re2332} & & & & & \\ {\rm cqq3Re2332} & & & & & \\ {\rm cqq3Re1112} & & & & & \\ {\rm cqq3Re1112} & & & & & \\ {\rm cqq3Re1112} & & & & & \\ {\rm cqq3Re1113} & & & & & \\ {\rm cqq3Re1113} & & & & & \\ {\rm cqq3Re1123} & & & & & \\ {\rm cqq3Re1123} & & & & & \\ {\rm cqq3Re1123} & & & & \\ {\rm cqq3Re1212} & & & & \\ {\rm cqq3Re1213} & & & & \\ {\rm cqq3Re1212} & & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1212} & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re12212} & & \\ {\rm cqq3Re1222} & & \\ {\rm cqq3Re12$ | | $(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/{\rm TeV}^2$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqq3Re1221} & & & & & & & & & & & & & & & & & & \\ {\rm cqq3Re1331} & & & & & & & & & & & & & & & & & & &$ | | $(\bar{q}_2\gamma_\mu\sigma^Iq_2)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/{\rm TeV}^2$ | \mathbf{R} |
| $\begin{array}{lllll} {\rm cqq3Re1331} & & & & & & & & & & & & & & & & & & &$ | cqq3Re1221 | $(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_2\gamma^\mu\sigma^Iq_1)/\text{TeV}^2$ | R |
| $\begin{array}{llll} {\rm cqq3Re1112} & & & & & & & & & & & & & & & & & & \\ {\rm cqq3Re1113} & & & & & & & & & & & & & & & & & \\ {\rm cqq3Re1113} & & & & & & & & & & & & & & & & \\ {\rm cqq3Re1123} & & & & & & & & & & & & & & & \\ {\rm cqq3Re1123} & & & & & & & & & & & & & & \\ {\rm cqq3Re1212} & & & & & & & & & & & & & \\ {\rm cqq3Re1212} & & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & \\ {\rm cqq3Re1213} & & & & & & \\ {\rm cqq3Re1213} & & & & & & \\ {\rm cqq3Re1213} & & & & & & \\ {\rm cqq3Re1213} & & & & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cq$ | cqq3Re1331 | $(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_3\gamma^\mu\sigma^Iq_1)/\text{TeV}^2$ | R |
| $\begin{array}{llll} {\rm cqq3Re1112} & & & & & & & & & & & & & & & & & & \\ {\rm cqq3Re1113} & & & & & & & & & & & & & & & & & \\ {\rm cqq3Re1113} & & & & & & & & & & & & & & & & \\ {\rm cqq3Re1123} & & & & & & & & & & & & & & & \\ {\rm cqq3Re1123} & & & & & & & & & & & & & & \\ {\rm cqq3Re1212} & & & & & & & & & & & & & \\ {\rm cqq3Re1212} & & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & \\ {\rm cqq3Re1213} & & & & & & & \\ {\rm cqq3Re1213} & & & & & & \\ {\rm cqq3Re1213} & & & & & & \\ {\rm cqq3Re1213} & & & & & & \\ {\rm cqq3Re1213} & & & & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & & \\ {\rm cqq3Re1213} & & & \\ {\rm cqq3Re1213} & & & & \\ {\rm cqq3Re1212} & & \\ {\rm cqq3Re1213} & & \\ {\rm cqq3Re1212} & & \\ {\rm cq$ | | $(\bar{q}_2\gamma_\mu\sigma^Iq_3)(\bar{q}_3\gamma^\mu\sigma^Iq_2)/{\rm TeV}^2$ | R |
| $\begin{array}{lll} {\rm cqq3Re1123} & & & & & (\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqq3Re1212} & & & & & (\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqq3Re1213} & & & & & (\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cqq3Re1112 | $(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Re1212 $ \begin{array}{ll} (\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cqq3Re1213} & (\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \end{array} $ | cqq3Re1113 | $(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Re1212 $ \begin{array}{ll} (\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cqq3Re1213} & (\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \end{array} $ | cqq3Re1123 | $(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Re1213 $(\bar{q}_1 \gamma_{\mu} \sigma^I q_2)(\bar{q}_1 \gamma^{\mu} \sigma^I q_3)/\text{TeV}^2 + \text{h.c.}$ R cqq3Re1222 $(\bar{q}_1 \gamma_{\mu} \sigma^I q_2)(\bar{q}_2 \gamma^{\mu} \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ R | | $(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Re1222 $(\bar{q}_1 \gamma_{\mu} \sigma^I q_2)(\bar{q}_2 \gamma^{\mu} \sigma^I q_2)/\text{TeV}^2 + \text{h.c.}$ R | | $(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| | cqq3Re1222 | $(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|------------|--|--------------|
| cqq3Re1232 | $(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_3\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Re1233 | $(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Re1313 | $(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Re1322 | $(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Re1323 | $(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Re1333 | $(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Re2223 | $(\bar{q}_2\gamma_\mu\sigma^Iq_2)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Re2323 | $(\bar{q}_2\gamma_\mu\sigma^Iq_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Re3323 | $(\bar{q}_3\gamma_\mu\sigma^Iq_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Re1231 | $(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_3\gamma^\mu\sigma^Iq_1)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Re1223 | $(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Re1332 | $(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_3\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Im1112 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Im1113 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Im1123 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_1)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqq3Im1212 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Im1213 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | \mathbf{R} |
| cqq3Im1222 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/\text{TeV}^2+\text{h.c.}$ | ${ m R}$ |
| cqq3Im1232 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_3\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Im1233 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | ${ m R}$ |
| cqq3Im1313 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_1\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Im1322 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_2\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Im1323 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqq3Im1333 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_3\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqq3Im2223 | $i(\bar{q}_2\gamma_\mu\sigma^Iq_2)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Im2323 | $i(\bar{q}_2\gamma_\mu\sigma^Iq_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2+\text{h.c.}$ | R |
| cqq3Im3323 | $i(\bar{q}_3\gamma_\mu\sigma^Iq_3)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqq3Im1231 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_3\gamma^\mu\sigma^Iq_1)/\text{TeV}^2+\text{h.c.}$ | \mathbf{R} |
| cqq3Im1223 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_2)(\bar{q}_2\gamma^\mu\sigma^Iq_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqq3Im1332 | $i(\bar{q}_1\gamma_\mu\sigma^Iq_3)(\bar{q}_3\gamma^\mu\sigma^Iq_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeRe1111 | $(\bar{e}_1\gamma_\mu e_1)(\bar{e}_1\gamma^\mu e_1)/{\rm TeV}^2$ | ${ m R}$ |
| ceeRe2222 | $(\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_2)/{ m TeV}^2$ | ${ m R}$ |
| ceeRe3333 | $(\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3)/{ m TeV}^2$ | R |
| ceeRe1122 | $(\bar{e}_1\gamma_\mu e_1)(\bar{e}_2\gamma^\mu e_2)/{ m TeV}^2$ | ${ m R}$ |
| ceeRe1133 | $(\bar{e}_1\gamma_\mu e_1)(\bar{e}_3\gamma^\mu e_3)/\mathrm{TeV}^2$ | ${ m R}$ |
| ceeRe2233 | $(\bar{e}_2\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3)/{\rm TeV}^2$ | ${ m R}$ |
| ceeRe1112 | $(\bar{e}_1 \gamma_{\mu} e_1)(\bar{e}_1 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeRe1113 | $(\bar{e}_1 \gamma_{\mu} e_1)(\bar{e}_1 \gamma^{\mu} e_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceeRe1123 | $(\bar{e}_1 \gamma_{\mu} e_1)(\bar{e}_2 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceeRe1212 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{e}_1 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeRe1213 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{e}_1 \gamma^{\mu} e_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceeRe1222 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{e}_2 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|-----------|---|--------------|
| ceeRe1232 | $(\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeRe1233 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{e}_3 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeRe1313 | $(\bar{e}_1 \gamma_{\mu} e_3)(\bar{e}_1 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeRe1322 | $(\bar{e}_1 \gamma_{\mu} e_3)(\bar{e}_2 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeRe1323 | $(\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeRe1333 | $(\bar{e}_1 \gamma_{\mu} e_3)(\bar{e}_3 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeRe2223 | $(\bar{e}_2 \gamma_{\mu} e_2)(\bar{e}_2 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeRe2323 | $(\bar{e}_2\gamma_{\mu}e_3)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeRe3323 | $(\bar{e}_3 \gamma_{\mu} e_3)(\bar{e}_2 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1112 | $i(\bar{e}_1\gamma_\mu e_1)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1113 | $i(\bar{e}_1\gamma_{\mu}e_1)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeIm1123 | $i(\bar{e}_1\gamma_{\mu}e_1)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1212 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1213 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1222 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{e}_2\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeIm1232 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{e}_3\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1233 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{e}_3\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1313 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1322 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{e}_2\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1323 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm1333 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeIm2223 | $i(\bar{e}_2\gamma_{\mu}e_2)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceeIm2323 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceeIm3323 | $i(\bar{e}_3\gamma_{\mu}e_3)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuuRe1111 | $(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2$ | R |
| cuuRe2222 | $(\bar{u}_2\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2)/{\rm TeV}^2$ | \mathbf{R} |
| cuuRe3333 | $(\bar{u}_3\gamma_\mu u_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ | ${ m R}$ |
| cuuRe1122 | $(\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_2)/{\rm TeV}^2$ | \mathbf{R} |
| cuuRe1133 | $(\bar{u}_1\gamma_\mu u_1)(\bar{u}_3\gamma^\mu u_3)/{\rm TeV}^2$ | R |
| cuuRe2233 | $(\bar{u}_2\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3)/{\rm TeV}^2$ | \mathbf{R} |
| cuuRe1221 | $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2$ | \mathbf{R} |
| cuuRe1331 | $(\bar{u}_1\gamma_\mu u_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2$ | \mathbf{R} |
| cuuRe2332 | $(\bar{u}_2\gamma_\mu u_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2$ | \mathbf{R} |
| cuuRe1112 | $(\bar{u}_1 \gamma_{\mu} u_1)(\bar{u}_1 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuuRe1113 | $(\bar{u}_1 \gamma_{\mu} u_1)(\bar{u}_1 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cuuRe1123 | $(\bar{u}_1 \gamma_{\mu} u_1)(\bar{u}_2 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuuRe1212 | $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuuRe1213 | $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuuRe1222 | $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuuRe1232 | $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuuRe1233 | $(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cuuRe1313 | $(\bar{u}_1 \gamma_{\mu} u_3)(\bar{u}_1 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|---|-----------|---|--------------|
| $\begin{array}{c} \text{cuuRe} 1333 & (\bar{u}_1\gamma_\mu u_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuRe} 2223 & (\bar{u}_2\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuRe} 2323 & (\bar{u}_2\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuRe} 3233 & (\bar{u}_3\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuRe} 1231 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuRe} 1223 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuRe} 1332 & (\bar{u}_1\gamma_\mu u_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1112 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1113 & i(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1113 & i(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1212 & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1212 & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1212 & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1222 & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1232 & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1233 & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1313 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1323 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1323 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1323 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1323 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1323 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1323 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1323 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1223 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cuuIm} 1223 & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cdRe} 1221 & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} & $ | cuuRe1322 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuRe1323 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cuuRe1333 | $(\bar{u}_1\gamma_{\mu}u_3)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{c} \text{cuuRe3323} & (\bar{u}_3\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{cuRe1231} & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuRe1232} & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuRe1332} & (\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1112} & i(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1112} & i(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1113} & i(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1212} & i(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1212} & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1222} & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1232} & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1232} & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1333} & i(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1322} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1333} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1333} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm2223} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm2223} & i(\bar{u}_2\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1233} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1233} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1231} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuuIm1232} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cuIm1332} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cudRe1113} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cudRe1113} & i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cddRe1111} & (\bar{d}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cddRe1222} & i(\bar{d}_1\gamma_\mu u_3)(\bar{d}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.} \\ \text{R} \\ \text{cddRe1233} & (\bar{d}_1\gamma_\mu u_$ | cuuRe2223 | $(\bar{u}_2\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cuuRe2323 | $(\bar{u}_2\gamma_{\mu}u_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuRe3323 | $(\bar{u}_3\gamma_{\mu}u_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuRe1231 | $(\bar{u}_1 \gamma_{\mu} u_2)(\bar{u}_3 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuRe1223 | $(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cuuRe1332 | $(\bar{u}_1 \gamma_{\mu} u_3)(\bar{u}_3 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cuuIm1112 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cuuIm1113 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1123 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cuuIm1212 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cuuIm1213 | $i(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1222 | $i(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_2\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1232 | $i(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_3\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1233 | $i(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1313 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1322 | $i(\bar{u}_1\gamma_{\mu}u_3)(\bar{u}_2\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1323 | $i(\bar{u}_1\gamma_{\mu}u_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1333 | $i(\bar{u}_1\gamma_{\mu}u_3)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm2223 | $i(\bar{u}_2\gamma_{\mu}u_2)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm2323 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm3323 | $i(\bar{u}_3\gamma_{\mu}u_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1231 | $i(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_3\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1223 | $i(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cuuIm1332 | $i(\bar{u}_1\gamma_{\mu}u_3)(\bar{u}_3\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cddRe1111 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cddRe2222 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cddRe3333 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cddRe1122 | $(\bar{d}_1\gamma_\mu d_1)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cddRe1133 | $(\bar{d}_1\gamma_\mu d_1)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cddRe2233 | $(\bar{d}_2\gamma_\mu d_2)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cddRe1221 | $(\bar{d}_1\gamma_\mu d_2)(\bar{d}_2\gamma^\mu d_1)/{ m TeV}^2$ | R |
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | cddRe1331 | $(d_1\gamma_\mu d_3)(d_3\gamma^\mu d_1)/{ m TeV}^2$ | R |
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | cddRe2332 | $(\bar{d}_2\gamma_\mu d_3)(\bar{d}_3\gamma^\mu d_2)/{ m TeV}^2$ | R |
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | cddRe1112 | | R |
| cddRe1212 $(\bar{d}_1 \gamma_{\mu} d_2)(\bar{d}_1 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ R cddRe1213 $(\bar{d}_1 \gamma_{\mu} d_2)(\bar{d}_1 \gamma^{\mu} d_3)/\text{TeV}^2 + \text{h.c.}$ R | cddRe1113 | | \mathbf{R} |
| cddRe1212 $(\bar{d}_1 \gamma_{\mu} d_2)(\bar{d}_1 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ R cddRe1213 $(\bar{d}_1 \gamma_{\mu} d_2)(\bar{d}_1 \gamma^{\mu} d_3)/\text{TeV}^2 + \text{h.c.}$ R | cddRe1123 | $(\bar{d}_1\gamma_\mu d_1)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| | cddRe1212 | $(\bar{d}_1 \gamma_{\mu} d_2)(\bar{d}_1 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cddRe1222 $(\bar{d}_1\gamma_\mu d_2)(\bar{d}_2\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.}$ R | cddRe1213 | | R |
| | cddRe1222 | $(\bar{d}_1\gamma_\mu d_2)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |

| WC name | Operator | Type |
|-----------|---|--------------|
| cddRe1232 | $(\bar{d}_1\gamma_\mu d_2)(\bar{d}_3\gamma^\mu d_2)/{ m TeV}^2 + { m h.c.}$ | ${ m R}$ |
| cddRe1233 | $(\bar{d}_1 \gamma_{\mu} d_2)(\bar{d}_3 \gamma^{\mu} d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddRe1313 | $(\bar{d}_1 \gamma_{\mu} d_3)(\bar{d}_1 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cddRe1322 | $(\bar{d}_1\gamma_\mu d_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddRe1323 | $(\bar{d}_1\gamma_\mu d_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddRe1333 | $(\bar{d}_1\gamma_\mu d_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddRe2223 | $(\bar{d}_2\gamma_\mu d_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddRe2323 | $(\bar{d}_2\gamma_\mu d_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddRe3323 | $(\bar{d}_3\gamma_\mu d_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddRe1231 | $(\bar{d}_1 \gamma_{\mu} d_2)(\bar{d}_3 \gamma^{\mu} d_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cddRe1223 | $(\bar{d}_1 \gamma_{\mu} d_2)(\bar{d}_2 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cddRe1332 | $(\bar{d}_1 \gamma_{\mu} d_3)(\bar{d}_3 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1112 | $i(\bar{d}_1\gamma_\mu d_1)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1113 | $i(\bar{d}_1\gamma_\mu d_1)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1123 | $i(\bar{d}_1\gamma_\mu d_1)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1212 | $i(\bar{d}_1\gamma_\mu d_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1213 | $i(\bar{d}_1\gamma_\mu d_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1222 | $i(\bar{d}_1\gamma_\mu d_2)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1232 | $i(\bar{d}_1\gamma_\mu d_2)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1233 | $i(\bar{d}_1\gamma_\mu d_2)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1313 | $i(\bar{d}_1\gamma_\mu d_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1322 | $i(\bar{d}_1\gamma_\mu d_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1323 | $i(\bar{d}_1\gamma_\mu d_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1333 | $i(\bar{d}_1\gamma_\mu d_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm2223 | $i(\bar{d}_2\gamma_\mu d_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm2323 | $i(\bar{d}_2\gamma_\mu d_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm3323 | $i(\bar{d}_3\gamma_\mu d_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1231 | $i(\bar{d}_1\gamma_\mu d_2)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1223 | $i(\bar{d}_1\gamma_\mu d_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cddIm1332 | $i(\bar{d}_1\gamma_\mu d_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1111 | $(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ | R |
| ceuRe1122 | $(\bar{e}_1\gamma_\mu e_1)(\bar{u}_2\gamma^\mu u_2)/{\rm TeV}^2$ | \mathbf{R} |
| ceuRe1133 | $(\bar{e}_1\gamma_\mu e_1)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ | R |
| ceuRe2222 | $(\bar{e}_2\gamma_\mu e_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2$ | R |
| ceuRe2233 | $(\bar{e}_2\gamma_\mu e_2)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ | \mathbf{R} |
| ceuRe3333 | $(\bar{e}_3\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ | R |
| ceuRe1221 | $(\bar{e}_1\gamma_\mu e_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1331 | $(\bar{e}_1\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2332 | $(\bar{e}_2\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2211 | $(\bar{e}_2\gamma_\mu e_2)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ | R |
| ceuRe3311 | $(\bar{e}_3\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ | R |
| ceuRe3322 | $(\bar{e}_3\gamma_\mu e_3)(\bar{u}_2\gamma^\mu u_2)/{\rm TeV}^2$ | ${ m R}$ |

| WC name | Operator | Type |
|-----------|---|--------------|
| ceuRe1112 | $(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceuRe1113 | $(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1123 | $(\bar{e}_1 \gamma_{\mu} e_1)(\bar{u}_2 \gamma^{\mu} u_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1212 | $(\bar{e}_1\gamma_\mu e_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1213 | $(\bar{e}_1\gamma_\mu e_2)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1222 | $(\bar{e}_1\gamma_\mu e_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1232 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{u}_3 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1233 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{u}_3 \gamma^{\mu} u_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuRe1313 | $(\bar{e}_1 \gamma_{\mu} e_3)(\bar{u}_1 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1322 | $(\bar{e}_1 \gamma_{\mu} e_3)(\bar{u}_2 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1323 | $(\bar{e}_1 \gamma_{\mu} e_3)(\bar{u}_2 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1333 | $(\bar{e}_1 \gamma_{\mu} e_3)(\bar{u}_3 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2223 | $(\bar{e}_2 \gamma_\mu e_2)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2323 | $(\bar{e}_2 \gamma_\mu e_3)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe3323 | $(\bar{e}_3 \gamma_{\mu} e_3)(\bar{u}_2 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1231 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{u}_3 \gamma^{\mu} u_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1223 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{u}_2 \gamma^{\mu} u_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1332 | $(\bar{e}_1\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1211 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{u}_1 \gamma^{\mu} u_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1311 | $(\bar{e}_1\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1312 | $(\bar{e}_1\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe1321 | $(\bar{e}_1\gamma_\mu e_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2212 | $(\bar{e}_2 \gamma_{\mu} e_2)(\bar{u}_1 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2213 | $(\bar{e}_2 \gamma_{\mu} e_2)(\bar{u}_1 \gamma^{\mu} u_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2311 | $(\bar{e}_2 \gamma_{\mu} e_3)(\bar{u}_1 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2312 | $(\bar{e}_2 \gamma_\mu e_3)(\bar{u}_1 \gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2313 | $(\bar{e}_2 \gamma_{\mu} e_3)(\bar{u}_1 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2321 | $(\bar{e}_2 \gamma_\mu e_3)(\bar{u}_2 \gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2322 | $(\bar{e}_2\gamma_\mu e_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2331 | $(\bar{e}_2 \gamma_{\mu} e_3)(\bar{u}_3 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe2333 | $(\bar{e}_2\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe3312 | $(\bar{e}_3 \gamma_{\mu} e_3)(\bar{u}_1 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuRe3313 | $(\bar{e}_3 \gamma_{\mu} e_3)(\bar{u}_1 \gamma^{\mu} u_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1221 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{u}_2\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1331 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_3\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm2332 | $i(\bar{e}_2\gamma_{\mu}e_3)(\bar{u}_3\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1112 | $i(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1113 | $i(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1123 | $i(\bar{e}_1\gamma_\mu e_1)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1212 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1213 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1222 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{u}_2\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| WC name | Operator | Type |
|-----------|--|--------------|
| ceuIm1232 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1233 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1313 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm1322 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_2\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1323 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1333 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm2223 | $i(\bar{e}_2\gamma_{\mu}e_2)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm2323 | $i(\bar{e}_2\gamma_{\mu}e_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm3323 | $i(\bar{e}_3\gamma_{\mu}e_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceuIm1231 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{u}_3\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm1223 | $i(\bar{e}_1\gamma_{\mu}e_2)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm1332 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_3\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm1211 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| ceuIm1311 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1312 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm1321 | $i(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_2\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm2212 | $i(\bar{e}_2\gamma_{\mu}e_2)(\bar{u}_1\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm2213 | $i(\bar{e}_2\gamma_{\mu}e_2)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm2311 | $i(\bar{e}_2\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm2312 | $i(\bar{e}_2\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| ceuIm2313 | $i(\bar{e}_2\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm2321 | $i(\bar{e}_2\gamma_{\mu}e_3)(\bar{u}_2\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm2322 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm2331 | $i(\bar{e}_2\gamma_{\mu}e_3)(\bar{u}_3\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm2333 | $i(\bar{e}_2\gamma_{\mu}e_3)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm3312 | $i(\bar{e}_3\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| ceuIm3313 | $i(\bar{e}_3\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cedRe1111 | $(\bar{e}_1\gamma_\mu e_1)(\bar{d}_1\gamma^\mu d_1)/{ m TeV}^2$ | \mathbf{R} |
| cedRe1122 | $(\bar{e}_1\gamma_\mu e_1)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | R |
| cedRe1133 | $(\bar{e}_1\gamma_\mu e_1)(\bar{d}_3\gamma^\mu d_3)/{\rm TeV}^2$ | R |
| cedRe2222 | $(\bar{e}_2\gamma_\mu e_2)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | R |
| cedRe2233 | $(\bar{e}_2\gamma_\mu e_2)(\bar{d}_3\gamma^\mu d_3)/{\rm TeV}^2$ | R |
| cedRe3333 | $(\bar{e}_3\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | R |
| cedRe1221 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{d}_2 \gamma^{\mu} d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1331 | $(\bar{e}_1 \gamma_{\mu} e_3) (\bar{d}_3 \gamma^{\mu} d_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2332 | $(\bar{e}_2 \gamma_{\mu} e_3)(\bar{d}_3 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2211 | $(\bar{e}_2\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_1)/{ m TeV}^2$ | R |
| cedRe3311 | $(\bar{e}_3\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_1)/{ m TeV}^2$ | R |
| cedRe3322 | $(\bar{e}_3\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | R |
| cedRe1112 | $(\bar{e}_1 \gamma_{\mu} e_1) (\bar{d}_1 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1113 | $(\bar{e}_1 \gamma_{\mu} e_1)(\bar{d}_1 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1123 | $(\bar{e}_1\gamma_\mu e_1)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| WC name | Operator | Type |
|-----------|--|----------|
| cedRe1212 | $(\bar{e}_1\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1213 | $(\bar{e}_1 \gamma_{\mu} e_2)(\bar{d}_1 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1222 | $(\bar{e}_1\gamma_\mu e_2)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1232 | $(\bar{e}_1 \gamma_{\mu} e_2) (\bar{d}_3 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1233 | $(\bar{e}_1\gamma_\mu e_2)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cedRe1313 | $(\bar{e}_1 \gamma_{\mu} e_3) (\bar{d}_1 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1322 | $(\bar{e}_1 \gamma_{\mu} e_3) (\bar{d}_2 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1323 | $(\bar{e}_1 \gamma_{\mu} e_3)(\bar{d}_2 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1333 | $(\bar{e}_1 \gamma_{\mu} e_3) (\bar{d}_3 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2223 | $(\bar{e}_2\gamma_\mu e_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2323 | $(\bar{e}_2 \gamma_{\mu} e_3) (\bar{d}_2 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe3323 | $(\bar{e}_3\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + { m h.c.}$ | R |
| cedRe1231 | $(\bar{e}_1\gamma_\mu e_2)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1223 | $(\bar{e}_1\gamma_\mu e_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1332 | $(\bar{e}_1\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_2)/\mathrm{TeV}^2 + \mathrm{h.c.}$ | R |
| cedRe1211 | $(\bar{e}_1\gamma_{\mu}e_2)(\bar{d}_1\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1311 | $(\bar{e}_1\gamma_{\mu}e_3)(\bar{d}_1\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1312 | $(\bar{e}_1\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe1321 | $(\bar{e}_1\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2212 | $(\bar{e}_2\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_2)/\mathrm{TeV}^2 + \mathrm{h.c.}$ | R |
| cedRe2213 | $(\bar{e}_2\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2311 | $(\bar{e}_2\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2312 | $(\bar{e}_2\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2313 | $(\bar{e}_2\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2321 | $(\bar{e}_2\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2322 | $(\bar{e}_2\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cedRe2331 | $(\bar{e}_2\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedRe2333 | $(\bar{e}_2 \gamma_{\mu} e_3) (\bar{d}_3 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe3312 | $(\bar{e}_3 \gamma_{\mu} e_3) (\bar{d}_1 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cedRe3313 | $(\bar{e}_3\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1221 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1331 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm2332 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1112 | $i(\bar{e}_1\gamma_\mu e_1)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1113 | $i(\bar{e}_1\gamma_\mu e_1)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1123 | $i(\bar{e}_1\gamma_\mu e_1)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1212 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1213 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}_2^2 + \text{h.c.}$ | R |
| cedIm1222 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1232 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1233 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1313 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|------------|---|--------------|
| cedIm1322 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cedIm1323 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1333 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm2223 | $i(\bar{e}_2\gamma_\mu e_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm2323 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm3323 | $i(\bar{e}_3\gamma_{\mu}e_3)(\bar{d}_2\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1231 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1223 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1332 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm1211 | $i(\bar{e}_1\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm1311 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm1312 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm1321 | $i(\bar{e}_1\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm2212 | $i(\bar{e}_2\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm2213 | $i(\bar{e}_2\gamma_\mu e_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm2311 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm2312 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm2313 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cedIm2321 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm2322 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm2331 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cedIm2333 | $i(\bar{e}_2\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm3312 | $i(\bar{e}_3\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cedIm3313 | $i(\bar{e}_3\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Re1111 | $(\bar{u}_1\gamma_\mu u_1)(\bar{d}_1\gamma^\mu d_1)/{ m TeV}^2$ | \mathbf{R} |
| cud1Re1122 | $(\bar{u}_1\gamma_\mu u_1)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | ${ m R}$ |
| cud1Re1133 | $(\bar{u}_1\gamma_\mu u_1)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | ${ m R}$ |
| cud1Re2222 | $(\bar{u}_2\gamma_\mu u_2)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | ${ m R}$ |
| cud1Re2233 | $(\bar{u}_2\gamma_\mu u_2)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | \mathbf{R} |
| cud1Re3333 | $(\bar{u}_3\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_3)/{\rm TeV}^2$ | \mathbf{R} |
| cud1Re1221 | $(\bar{u}_1 \gamma_{\mu} u_2)(\bar{d}_2 \gamma^{\mu} d_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Re1331 | $(\bar{u}_1 \gamma_{\mu} u_3)(\bar{d}_3 \gamma^{\mu} d_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cud1Re2332 | $(\bar{u}_2 \gamma_{\mu} u_3)(\bar{d}_3 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Re2211 | $(\bar{u}_2\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2$ | \mathbf{R} |
| cud1Re3311 | $(\bar{u}_3\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2$ | ${ m R}$ |
| cud1Re3322 | $(\bar{u}_3\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | R |
| cud1Re1112 | $(\bar{u}_1 \gamma_{\mu} u_1)(\bar{d}_1 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1113 | $(\bar{u}_1\gamma_\mu u_1)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1123 | $(\bar{u}_1 \gamma_{\mu} u_1)(\bar{d}_2 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1212 | $(\bar{u}_1\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1213 | $(\bar{u}_1 \gamma_{\mu} u_2)(\bar{d}_1 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1222 | $(\bar{u}_1\gamma_\mu u_2)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|------------|--|--------------|
| cud1Re1232 | $(\bar{u}_1 \gamma_{\mu} u_2)(\bar{d}_3 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1233 | $(\bar{u}_1\gamma_\mu u_2)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Re1313 | $(\bar{u}_1\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1322 | $(\bar{u}_1\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1323 | $(\bar{u}_1 \gamma_{\mu} u_3)(\bar{d}_2 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1333 | $(\bar{u}_1\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2223 | $(\bar{u}_2 \gamma_{\mu} u_2) (\bar{d}_2 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2323 | $(\bar{u}_2\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re3323 | $(\bar{u}_3\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.}$ | R |
| cud1Re1231 | $(\bar{u}_1\gamma_\mu u_2)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1223 | $(\bar{u}_1\gamma_\mu u_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1332 | $(\bar{u}_1 \gamma_{\mu} u_3)(\bar{d}_3 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1211 | $(\bar{u}_1\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1311 | $(\bar{u}_1\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1312 | $(\bar{u}_1\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re1321 | $(\bar{u}_1\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2212 | $(\bar{u}_2\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2213 | $(\bar{u}_2\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2311 | $(\bar{u}_2 \gamma_\mu u_3)(\bar{d}_1 \gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2312 | $(\bar{u}_2\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2313 | $(\bar{u}_2\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2321 | $(\bar{u}_2 \gamma_{\mu} u_3)(\bar{d}_2 \gamma^{\mu} d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2322 | $(\bar{u}_2\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2331 | $(\bar{u}_2\gamma_{\mu}u_3)(\bar{d}_3\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re2333 | $(\bar{u}_2 \gamma_{\mu} u_3)(\bar{d}_3 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re3312 | $(\bar{u}_3 \gamma_{\mu} u_3)(\bar{d}_1 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Re3313 | $(\bar{u}_3 \gamma_{\mu} u_3)(\bar{d}_1 \gamma^{\mu} d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1221 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1331 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2332 | $i(\bar{u}_2\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1112 | $i(\bar{u}_1\gamma_\mu u_1)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1113 | $i(\bar{u}_1\gamma_\mu u_1)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1123 | $i(\bar{u}_1\gamma_\mu u_1)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1212 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1213 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1222 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1232 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Im1233 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1313 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Im1322 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Im1323 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1333 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| | | |

| WC name | Operator | Type |
|------------|--|--------------|
| cud1Im2223 | $i(\bar{u}_2\gamma_\mu u_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2323 | $i(\bar{u}_2\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im3323 | $i(\bar{u}_3\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1231 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Im1223 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1332 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1211 | $i(\bar{u}_1\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1311 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud1Im1312 | $i(\bar{u}_1\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im1321 | $i(\bar{u}_1\gamma_{\mu}u_3)(\bar{d}_2\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2212 | $i(\bar{u}_2\gamma_\mu u_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2213 | $i(\bar{u}_2\gamma_{\mu}u_2)(\bar{d}_1\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2311 | $i(\bar{u}_2\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2312 | $i(\bar{u}_2\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2313 | $i(\bar{u}_2\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2321 | $i(\bar{u}_2\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2322 | $i(\bar{u}_2\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2331 | $i(\bar{u}_2\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im2333 | $i(\bar{u}_2\gamma_{\mu}u_3)(\bar{d}_3\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im3312 | $i(\bar{u}_3\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud1Im3313 | $i(\bar{u}_3\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Re1111 | $(\bar{u}_1\gamma_\mu T^A u_1)(\bar{d}_1\gamma^\mu T^A d_1)/\text{TeV}^2$ | R |
| cud8Re1122 | $(\bar{u}_1\gamma_\mu T^A u_1)(\bar{d}_2\gamma^\mu T^A d_2)/\text{TeV}^2$ | R |
| cud8Re1133 | $(\bar{u}_1\gamma_\mu T^A u_1)(\bar{d}_3\gamma^\mu T^A d_3)/\text{TeV}^2$ | R |
| cud8Re2222 | $(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_2)/\text{TeV}^2$ | \mathbf{R} |
| cud8Re2233 | $(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_3)/\text{TeV}^2$ | \mathbf{R} |
| cud8Re3333 | $(\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/\text{TeV}^2$ | \mathbf{R} |
| cud8Re1221 | $(\bar{u}_1 \gamma_{\mu} T^A u_2) (\bar{d}_2 \gamma^{\mu} T^A d_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud8Re1331 | $(\bar{u}_1 \gamma_{\mu} T^A u_3) (\bar{d}_3 \gamma^{\mu} T^A d_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud8Re2332 | $(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud8Re2211 | $(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_1)/\text{TeV}^2$ | \mathbf{R} |
| cud8Re3311 | $(\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)/\text{TeV}^2$ | R |
| cud8Re3322 | $(\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_2)/\text{TeV}^2$ | R |
| cud8Re1112 | $(\bar{u}_1 \gamma_{\mu} T^A u_1) (\bar{d}_1 \gamma^{\mu} T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud8Re1113 | $(\bar{u}_1 \gamma_{\mu} T^A u_1) (\bar{d}_1 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud8Re1123 | $(\bar{u}_1 \gamma_{\mu} T^A u_1) (\bar{d}_2 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud8Re1212 | $(\bar{u}_1 \gamma_{\mu} T^A u_2) (\bar{d}_1 \gamma^{\mu} T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud8Re1213 | $(\bar{u}_1 \gamma_{\mu} T^A u_2) (\bar{d}_1 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud8Re1222 | $(\bar{u}_1 \gamma_{\mu} T^A u_2) (\bar{d}_2 \gamma^{\mu} T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud8Re1232 | $(\bar{u}_1 \gamma_{\mu} T^A u_2) (\bar{d}_3 \gamma^{\mu} T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud8Re1233 | $(\bar{u}_1 \gamma_{\mu} T^A u_2) (\bar{d}_3 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cud8Re1313 | $(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| | | |

| $\begin{array}{c} {\rm cud8Re1322} & (\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1333} & (\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2233} & (\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2223} & (\bar{u}_2\gamma_\mu T^Au_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2233} & (\bar{u}_2\gamma_\mu T^Au_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3323} & (\bar{u}_3\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3323} & (\bar{u}_3\gamma_\mu T^Au_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1231} & (\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1323} & (\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_3\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1332} & (\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_3\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1332} & (\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1331} & (\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1311} & (\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1321} & (\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2212} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2213} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2213} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2313} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2313} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2322} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2322} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2323} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2323} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2323} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2323} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2333} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2333} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar$ | WC name | Operator | Type |
|---|------------|--|--------------|
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re1322 | | R |
| $\begin{array}{c} {\rm cud8Re2223} & (\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3232} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3232} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3231} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1223} & (\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1223} & (\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1223} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1332} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1311} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1311} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2212} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2212} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2213} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2311} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2312} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2312} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2322} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2322} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2333} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2333} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2331} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3312} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1221} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1333} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^$ | cud8Re1323 | | R |
| $\begin{array}{c} {\rm cud8Re2323} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3323} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1231} & (\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1232} & (\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1332} & (\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1332} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1311} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1312} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1312} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2212} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2212} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2213} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2311} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2312} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2313} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2322} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2323} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2333} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2333} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3312} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^$ | cud8Re1333 | $(\bar{u}_1 \gamma_{\mu} T^A u_3) (\bar{d}_3 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re2223 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re2323 | | R |
| $\begin{array}{c} {\rm cud8Re1223} & (\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1332} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1211} & (\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1311} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1312} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re1322} & (\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2321} & (\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2212} & (\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2213} & (\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2213} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2311} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2312} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2313} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2321} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2322} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2323} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re2333} & (\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3312} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1221} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1221} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1331} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm R} \\ {\rm cud8Im1232} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm R} \\ {\rm cud8Im1233} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm R} \\ {\rm cud8Im1233} & (\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm R} \\ {\rm cud8Im1233} & (\bar{u}_3\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm R} \\ {\rm cud8Im1233} & (\bar{u}_3$ | cud8Re3323 | | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re1231 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re1223 | | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re1332 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Re1211 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Re1311 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re1312 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Re1321 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Re2212 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Re2213 | $(\bar{u}_2 \gamma_{\mu} T^A u_2) (\bar{d}_1 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re2311 | | R |
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| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re2313 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Re2321 | | R |
| $\begin{array}{c} {\rm cud8Re2333} & (\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3312} & (\bar{u}_3\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Re3313} & (\bar{u}_3\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1221} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_2\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1331} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im2332} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1112} & i(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1113} & i(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1123} & i(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1212} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1212} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1213} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1222} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1232} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_3\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1233} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1313} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {$ | cud8Re2322 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re2331 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cud8Re2333 | $(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Re3312 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Re3313 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cud8Im1221 | | R |
| $\begin{array}{lllll} {\rm cud8Im1112} & i(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1113} & i(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1123} & i(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1212} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1213} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1222} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_2\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1232} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_3\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1233} & i(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1313} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1322} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1333} & i(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_\mu T^Au_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm$ | cud8Im1331 | | R |
| $\begin{array}{lllll} {\rm cud8Im1113} & & & & & & & & & & & & & & & & & & &$ | cud8Im2332 | | R |
| $\begin{array}{lllll} {\rm cud8Im1123} & i(\bar{u}_1\gamma_{\mu}T^Au_1)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1212} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_1\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1213} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_1\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1222} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1232} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1233} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1313} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1322} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1333} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im23$ | cud8Im1112 | $i(\bar{u}_1\gamma_{\mu}T^Au_1)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cud8Im1212} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_1\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1213} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_1\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1222} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1232} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1233} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1313} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1322} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1333} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im232$ | cud8Im1113 | | R |
| $\begin{array}{llll} {\rm cud8Im1213} & & & & & & & & & & & & & & & & & & \\ & & & & & & & & & & & & & & & & & & \\ & & & & & & & & & & & & & & & & \\ & & & & & & & & & & & & & & \\ & & & & & & & & & & & & \\ & & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & &$ | cud8Im1123 | | R |
| $\begin{array}{llll} {\rm cud8Im1222} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1232} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1233} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1313} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1322} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1333} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cud8Im1212 | | R |
| $\begin{array}{llll} {\rm cud8Im1232} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_2)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1233} & i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1313} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1322} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_2)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1333} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV^2} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cud8Im1213 | | R |
| $\begin{array}{llll} {\rm cud8Im1233} & & & & & & & & & & & & & & & & & & $ | cud8Im1222 | $i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cud8Im1313} & i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1322} & i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1333} & i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cud8Im1232 | $i(\bar{u}_1\gamma_{\mu}T^Au_2)(\bar{d}_3\gamma^{\mu}T^Ad_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cud8Im1322} & i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1323} & i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1333} & i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cud8Im1233 | | R |
| $\begin{array}{lll} {\rm cud8Im1323} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im1333} & i(\bar{u}_1\gamma_{\mu}T^Au_3)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_{\mu}T^Au_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cud8Im1313 | | R |
| $\begin{array}{lll} {\rm cud8Im1333} & i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2223} & i(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cud8Im2323} & i(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cud8Im1322 | | R |
| cud8Im2223 $i(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ R cud8Im2323 $i(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ R | cud8Im1323 | | ${ m R}$ |
| cud8Im2323 $i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\text{TeV}^2 + \text{h.c.}$ R | cud8Im1333 | | R |
| | cud8Im2223 | | ${ m R}$ |
| cud8Im3323 $i(\bar{u}_3\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\text{TeV}^2 + \text{h.c.}$ R | cud8Im2323 | | ${ m R}$ |
| | cud8Im3323 | $i(\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|------------|--|--------------|
| cud8Im1231 | $i(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cud8Im1223 | $i(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im1332 | $i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im1211 | $i(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im1311 | $i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im1312 | $i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im1321 | $i(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2212 | $i(\bar{u}_2\gamma_{\mu}T^Au_2)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2213 | $i(\bar{u}_2\gamma_{\mu}T^Au_2)(\bar{d}_1\gamma^{\mu}T^Ad_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2311 | $i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2312 | $i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2313 | $i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2321 | $i(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2322 | $i(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2331 | $i(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_3\gamma^{\mu}T^Ad_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im2333 | $i(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im3312 | $i(\bar{u}_3\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cud8Im3313 | $i(\bar{u}_3\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1111 | $(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_1\gamma^\mu e_1)/{ m TeV}^2$ | R |
| cleRe1122 | $(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_2\gamma^\mu e_2)/{ m TeV}^2$ | R |
| cleRe1133 | $(\bar{\ell}_1 \gamma_\mu \ell_1)(\bar{e}_3 \gamma^\mu e_3)/\text{TeV}^2$ | R |
| cleRe2222 | $(ar{\ell}_2\gamma_\mu\ell_2)(ar{e}_2\gamma^\mu e_2)/{ m TeV}^2$ | R |
| cleRe2233 | $(ar{\ell}_2\gamma_\mu\ell_2)(ar{e}_3\gamma^\mu e_3)/{ m TeV}^2$ | R |
| cleRe3333 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_3)/{ m TeV}^2$ | R |
| cleRe1221 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{e}_2 \gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1331 | $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{e}_3 \gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe2332 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe2211 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_1)/{ m TeV}^2$ | R |
| cleRe3311 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_1)/{ m TeV}^2$ | R |
| cleRe3322 | $(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_2\gamma^\mu e_2)/{ m TeV}^2$ | R |
| cleRe1112 | $(\bar{\ell}_1 \gamma_\mu \ell_1)(\bar{e}_1 \gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cleRe1113 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1123 | $(\bar{\ell}_1 \gamma_\mu \ell_1)(\bar{e}_2 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1212 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1213 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{e}_1 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1222 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{e}_2 \gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1232 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{e}_3 \gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1233 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{e}_3 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cleRe1313 | $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{e}_1 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1322 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1323 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cleRe1333 | $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{e}_3 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|--|-----------|---|--------------|
| cleRe3323 | cleRe2223 | | R |
| cleRe1231 | cleRe2323 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cleRe1223 $ (\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\epsilon}_2 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleRe1332 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\epsilon}_3 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleRe1211 $ (\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\epsilon}_1 \gamma^\mu e_1) / \text{TeV}^2 + \text{h.c.} $ cleRe1311 $ (\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\epsilon}_1 \gamma^\mu e_1) / \text{TeV}^2 + \text{h.c.} $ cleRe1311 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_1) / \text{TeV}^2 + \text{h.c.} $ cleRe1312 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_1) / \text{TeV}^2 + \text{h.c.} $ cleRe1321 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleRe2212 $ (\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{\epsilon}_1 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleRe2213 $ (\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{\epsilon}_1 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleRe2311 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_1) / \text{TeV}^2 + \text{h.c.} $ cleRe2312 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_1) / \text{TeV}^2 + \text{h.c.} $ cleRe2313 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleRe2314 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleRe2325 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleRe2326 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_2 \gamma^\mu e_1) / \text{TeV}^2 + \text{h.c.} $ cleRe2327 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_2 \gamma^\mu e_1) / \text{TeV}^2 + \text{h.c.} $ cleRe2333 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_2 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleRe2333 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\epsilon}_3 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleRe3312 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{\epsilon}_3 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleRe3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{\epsilon}_1 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleIm1221 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_2 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleIm1221 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_2 \gamma^\mu e_2) / \text{TeV}^2 + \text{h.c.} $ cleIm1233 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_2 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleIm1113 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleIm1112 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_2 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleIm1113 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleIm1123 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_1 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleIm1123 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_1 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleIm1223 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_1 \gamma^\mu e_3) / \text{TeV}^2 + \text{h.c.} $ cleIm1333 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu e_3$ | cleRe3323 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cleRe1332 $ \frac{(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe1311} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe1312} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe1321} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe2212} \qquad \frac{(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe2313} \qquad \frac{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe2312} \qquad \frac{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe2321} \qquad \frac{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe2322} \qquad \frac{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe3333} \qquad \frac{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleRe3312} \qquad \frac{(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleIm1331} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\ell}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}} \\ \text{cleIm1331} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}}{(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\ell}_1\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}} \\ \text{cleIm1112} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}}{(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}} \\ \text{cleIm1112} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}}{(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}} \\ \text{cleIm1123} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}}{(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_1\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}} \\ \text{cleIm1232} \qquad \frac{(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_1\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}}{(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\ell}_2\gamma^\mu e_2)/\bar{\ell}_2\gamma^2 + \text{h.c.}} \\ \text{cleIm1323} \qquad \frac$ | cleRe1231 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleRe1211 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_1\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleRe1311 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleRe1312 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe1312 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe1321 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleRe2112 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2213 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2312 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2313 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2314 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2315 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2316 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2317 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2331 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2331 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe3312 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_3\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe3313 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe3313 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm1221 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm1331 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm1232 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm1112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_3\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm1113 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_3\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm1123 $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm123 $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm123 $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm123 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm1333 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm1333 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_3)/\text{TeV}^2 + $ | cleRe1223 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cleRe1211 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_1\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleRe1311 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleRe1312 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe1312 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe1321 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleRe2112 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2213 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2312 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2313 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2314 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2315 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2316 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2317 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2331 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe2331 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe3312 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_3\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe3313 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleRe3313 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm1221 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm1331 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm1232 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm1112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_3\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm1113 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{\epsilon}_3\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm1123 $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm123 $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm123 $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{\ell}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm123 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm1333 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm1333 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{\epsilon}_2\gamma^\mu\epsilon_3)/\text{TeV}^2 + $ | cleRe1332 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cleRe1311 | cleRe1211 | $(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{e}_1 \gamma^{\mu} e_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe1311 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe1312 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe1321 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe2212 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe2213 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe2311 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe2312 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cleRe2313 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe2321 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe2322 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe2331 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe2333 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe3312 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleRe3313 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1221 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1331 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm2332 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1112 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1113 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1123 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1212 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1213 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} \text{cleIm1233} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{3}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1313} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{1}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1322} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{2})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1323} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1333} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{3}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2223} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2323} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm3323} & i(\bar{\ell}_{3}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1231} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{3}\gamma^{\mu}e_{1})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cleIm1222 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} \text{cleIm1233} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{3}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1313} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{1}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1322} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{2})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1323} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1333} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{3}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2223} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2323} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm3323} & i(\bar{\ell}_{3}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1231} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{3}\gamma^{\mu}e_{1})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cleIm1232 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{cleIm1313} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{1}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1322} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{2})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1323} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1333} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{3}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2223} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2323} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm3323} & i(\bar{\ell}_{3}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1231} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{3}\gamma^{\mu}e_{1})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cleIm1233 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_3\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llll} \text{cleIm1322} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{2})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1323} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1333} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{3}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2223} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2323} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm3323} & i(\bar{\ell}_{3}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1231} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{3}\gamma^{\mu}e_{1})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cleIm1313 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{CleIm1333} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{e}_{3}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2223} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm2323} & i(\bar{\ell}_{2}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm3323} & i(\bar{\ell}_{3}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1231} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{3}\gamma^{\mu}e_{1})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cleIm1322 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{cleIm2223} & i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm2323} & i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm3323} & i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm1231} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \end{array}$ | cleIm1323 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lll} \text{cleIm2323} & i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm3323} & i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm1231} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \end{array}$ | cleIm1333 | | ${ m R}$ |
| $\begin{array}{lll} \text{cleIm2323} & i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm3323} & i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm1231} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{cleIm1223} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \end{array}$ | cleIm2223 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cleIm3323 $i(\bar{\ell}_{3}\gamma_{\mu}\ell_{3})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.}$ R cleIm1231 $i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{3}\gamma^{\mu}e_{1})/\text{TeV}^{2} + \text{h.c.}$ R cleIm1223 $i(\bar{\ell}_{1}\gamma_{\mu}\ell_{2})(\bar{e}_{2}\gamma^{\mu}e_{3})/\text{TeV}^{2} + \text{h.c.}$ R | cleIm2323 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleIm1231 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm1223 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ R | cleIm3323 | $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleIm1223 $i(\bar{\ell}_1\gamma_{\mu}\ell_2)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm1332 $i(\bar{\ell}_1\gamma_{\mu}\ell_3)(\bar{e}_3\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ R | cleIm1231 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cleIm1332 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ R | cleIm1223 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| | cleIm1332 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|--|-----------|--|--------------|
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1211 | | ${ m R}$ |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm1311 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cleIm2212 $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2213 $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{\epsilon}_1\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm2311 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm2312 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm2313 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2313 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2321 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm2322 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm2323 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2331 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_3\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm2333 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_3\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm3312 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm3313 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm3313 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cluRe1111 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\muu_1)/\text{TeV}^2$ R cluRe1122 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_2\gamma^\muu_2)/\text{TeV}^2$ R cluRe1223 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\muu_2)/\text{TeV}^2$ R cluRe2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\muu_2)/\text{TeV}^2$ R cluRe2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_3\gamma^\muu_3)/\text{TeV}^2$ R cluRe2331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\muu_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe1331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\muu_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe1221 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\muu_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2332 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_3\gamma^\muu_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe331 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\muu_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe331 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\muu_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe331 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\muu_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\muu_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\muu_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe332 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\muu_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\muu_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe332 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\muu_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe332 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\muu_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe123 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\muu_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe133 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\muu_2)/\text{TeV}$ | cleIm1312 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cleIm2213 $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{\epsilon}_1\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm2311 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm2312 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2313 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2321 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2321 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2322 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2331 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2333 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2333 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm3312 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm3313 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe11311 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ R cluRe1122 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ R cluRe1123 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ R cluRe2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2$ R cluRe2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2$ R cluRe2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2$ R cluRe2333 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ R cluRe333 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ R cluRe332 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ R cluRe332 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe332 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe1123 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe123 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe1232 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe133 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/Te$ | cleIm1321 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cleIm2213 $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{\epsilon}_1\gamma^\mu\epsilon_3)/\text{TeV}^2 + \text{h.c.}$ R cleIm2311 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_1)/\text{TeV}^2 + \text{h.c.}$ R cleIm2312 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2313 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2321 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2321 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2322 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2331 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2333 $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\epsilon}_2\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm2333 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm3312 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cleIm3313 $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\epsilon}_1\gamma^\mu\epsilon_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe11311 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ R cluRe1122 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ R cluRe1123 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ R cluRe2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2$ R cluRe2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2$ R cluRe2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2$ R cluRe2333 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ R cluRe333 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ R cluRe332 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ R cluRe332 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ + h.c. R cluRe331 $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe332 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe1123 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe123 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe1232 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2$ + h.c. R cluRe133 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/Te$ | cleIm2212 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm2213 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm2311 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm2312 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm2313 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm2321 | | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm2322 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_2\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm2331 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cleIm2333 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cleIm3312 | $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cleIm3313 | $i(\bar{\ell}_3\gamma_{\mu}\ell_3)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe1111 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe1122 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_2\gamma^\mu u_2)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe1133 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_3\gamma^\mu u_3)/{ m TeV}^2$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe2222 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)/{ m TeV}^2$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe2233 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_3)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe3333 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe1221 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe1331 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe2332 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe2211 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe3311 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ | ${ m R}$ |
| $\begin{array}{llll} \text{cluRe1112} & & & & & & & & & & & & & & & & & & &$ | cluRe3322 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2$ | ${ m R}$ |
| $\begin{array}{llll} \text{cluRe1113} & & & & & & & & & & & & & & & & & & &$ | cluRe1112 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llll} \text{cluRe1212} & & & & & & & & & & & & & & & & & & &$ | cluRe1113 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} \text{cluRe1213} & & & & & & & & & & & & & & & & & & &$ | cluRe1123 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} \text{cluRe1213} & & & & & & & & & & & & & & & & & & &$ | cluRe1212 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} \text{cluRe1222} & & & & & & & & & & & & & & & & & &$ | cluRe1213 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{u}_1 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llll} \text{cluRe1232} & & & & & & & & & & & & & & & & & & &$ | cluRe1222 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} \text{cluRe1313} & & & & & & & & & & & & & & & & & & &$ | cluRe1232 | $(\bar{\ell}_1 \gamma_{\mu} \ell_2) (\bar{u}_3 \gamma^{\mu} u_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} \text{cluRe1313} & & & & & & & & & & & & & & & & & & &$ | cluRe1233 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lll} \text{cluRe1323} & (\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{u}_{2}\gamma^{\mu}u_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cluRe1333} & (\bar{\ell}_{1}\gamma_{\mu}\ell_{3})(\bar{u}_{3}\gamma^{\mu}u_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cluRe2223} & (\bar{\ell}_{2}\gamma_{\mu}\ell_{2})(\bar{u}_{2}\gamma^{\mu}u_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cluRe2323} & (\bar{\ell}_{2}\gamma_{\mu}\ell_{3})(\bar{u}_{2}\gamma^{\mu}u_{3})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cluRe1313 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cluRe1333 $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{u}_3 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R cluRe2223 $(\bar{\ell}_2 \gamma_\mu \ell_2)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R cluRe2323 $(\bar{\ell}_2 \gamma_\mu \ell_3)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R | cluRe1322 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cluRe1333 $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{u}_3 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R cluRe2223 $(\bar{\ell}_2 \gamma_\mu \ell_2)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R cluRe2323 $(\bar{\ell}_2 \gamma_\mu \ell_3)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R | cluRe1323 | | R |
| cluRe2323 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R | cluRe1333 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cluRe2323 $(\bar{\ell}_2 \gamma_\mu \ell_3)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R cluRe3323 $(\bar{\ell}_3 \gamma_\mu \ell_3)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ R | cluRe2223 | | R |
| cluRe3323 $(\bar{\ell}_3 \gamma_{\mu} \ell_3) (\bar{u}_2 \gamma^{\mu} u_3) / \text{TeV}^2 + \text{h.c.}$ R | cluRe2323 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| | cluRe3323 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |

| clure1231 $ (\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_3 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure1232 $ (\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure1332 $ (\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure1332 $ (\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure1311 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure1311 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure311 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure312 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure312 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2) / \text{TeV}^2 + \text{h.c.} $ clure213 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2) / \text{TeV}^2 + \text{h.c.} $ clure2213 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2) / \text{TeV}^2 + \text{h.c.} $ clure2311 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2) / \text{TeV}^2 + \text{h.c.} $ clure2312 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure2313 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure2321 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure2322 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure2323 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure2333 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure3312 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_1) / \text{TeV}^2 + \text{h.c.} $ clure3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2) / \text{TeV}^2 + \text{h.c.} $ clure3313 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure3314 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_2) / \text{TeV}^2 + \text{h.c.} $ clure3315 $ (\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_3) / \text{TeV}^2 + \text{h.c.} $ clure34 $ (\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_3) / $ | WC name | Operator | Type |
|--|-----------|--|----------|
| $\begin{array}{llll} \text{cluRe1332} & & & & & & & & & & & & & & & & & & &$ | cluRe1231 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluRe1223 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluRe1332 | | R |
| cluRe1312 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe1321 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2112 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2213 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2312 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2313 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2313 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2321 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2322 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2331 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2333 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe3312 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe3312 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe3313 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1221 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluIm1233 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluIm1233 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm122 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1222 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1223 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1232 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1333 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1322 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1323 $i(\bar{\ell}_1$ | cluRe1211 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cluRe1312 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe1321 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2112 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2213 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2312 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2313 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2313 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2321 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2322 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluRe2331 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe2333 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe3312 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe3312 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluRe3313 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1221 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluIm1233 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ R cluIm1233 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm112 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm122 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1222 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1223 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1232 $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1333 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1322 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1323 $i(\bar{\ell}_1$ | cluRe1311 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluRe1312 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{cluRe2213} & & & & & & & & & & & & & & & & & & &$ | cluRe1321 | $(\bar{\ell}_1 \gamma_{\mu} \ell_3) (\bar{u}_2 \gamma^{\mu} u_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{cluRe2311} & & & & & & & & & & & & & & & & & & $ | cluRe2212 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cluRe2312} & & & & & & & & & & & & & & & & & & &$ | cluRe2213 | | R |
| $\begin{array}{lll} {\rm cluRe2313} & & & & & & & & & & & & & & & & & & &$ | cluRe2311 | | R |
| $\begin{array}{llll} \text{cluRe2321} & & & & & & & & & & & & & & & & & & &$ | cluRe2312 | | R |
| $\begin{array}{llll} {\rm cluRe2322} & & & & & & & & & & & & & & & & & & $ | cluRe2313 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cluRe2331} & & & & & & & & & & & & & & & & & & &$ | cluRe2321 | | R |
| $\begin{array}{llll} {\rm cluRe2333} & & & & & & & & & & & & & & & & & &$ | cluRe2322 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluRe2331 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluRe2333 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluRe3312 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluRe3313 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluIm1221 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm1331 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm2332 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluIm1112 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluIm1113 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluIm1123 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm1212 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm1213 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm1222 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm1232 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm1233 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cluIm1322} & & & & & & & & & & & & & & & & & & $ | cluIm1313 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm1322 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cluIm1333} & & & & & & & & & & & & & & & & & &$ | cluIm1323 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cluIm2223} & & & & & & & & & & & & & & & & & & &$ | cluIm1333 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cluIm2323} & i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm3323} & i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1231} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1223} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1332} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1211} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1311} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1311} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cluIm2223 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cluIm3323} & i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1231} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1223} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1332} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1211} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1311} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cluIm2323 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cluIm1223} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1332} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1211} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cluIm1311} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \end{array}$ | cluIm3323 | $i(\bar{\ell}_3 \gamma_{\mu} \ell_3)(\bar{u}_2 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cluIm1332 $i(\bar{\ell}_1\gamma_{\mu}\ell_3)(\bar{u}_3\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ R cluIm1211 $i(\bar{\ell}_1\gamma_{\mu}\ell_2)(\bar{u}_1\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ R cluIm1311 $i(\bar{\ell}_1\gamma_{\mu}\ell_3)(\bar{u}_1\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ R | cluIm1231 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cluIm1211 $i(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{u}_1 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ R cluIm1311 $i(\bar{\ell}_1 \gamma_{\mu} \ell_3)(\bar{u}_1 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ R | cluIm1223 | | ${ m R}$ |
| cluIm1211 $i(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{u}_1 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ R cluIm1311 $i(\bar{\ell}_1 \gamma_{\mu} \ell_3)(\bar{u}_1 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ R | cluIm1332 | | ${ m R}$ |
| cluIm1311 $i(\bar{\ell}_1 \gamma_{\mu} \ell_3)(\bar{u}_1 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ R cluIm1312 $i(\bar{\ell}_1 \gamma_{\mu} \ell_3)(\bar{u}_1 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ R | cluIm1211 | | ${ m R}$ |
| cluIm1312 $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ R | cluIm1311 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| | cluIm1312 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|---|-----------|---|--------------|
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm1321 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm2212 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm2213 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm2311 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm2312 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm2313 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm2321 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cluIm2322 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluIm2331 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluIm2333 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluIm3312 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cluIm3313 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe1111 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe1122 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe1133 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2222 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2233 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_3\gamma^\mu d_3)/{\rm TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe3333 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe1221 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe1331 | $(\bar{\ell}_1 \gamma_\mu \ell_3)(\bar{d}_3 \gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2332 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2211 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe3311 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe3322 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe1112 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.}$ | R |
| $\begin{array}{llll} {\rm c1dRe1212} & & & & & & & & & & & & & & & & & & &$ | cldRe1113 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{cldRe1213} & & & & & & & & & & & & & & & & & & &$ | cldRe1123 | $(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm c1dRe1222} & & & & & & & & & & & & & & & & & &$ | cldRe1212 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe1213 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm c1dRe1233} & & & & & & & & & & & & & & & & & & $ | cldRe1222 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{c1dRe1313} & & & & & & & & & & & & & & & & & & &$ | cldRe1232 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm c1dRe1322} & & & & & & & & & & & & & & & & & & $ | cldRe1233 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm c1dRe1323} & & & & & & & & & & & & & & & & & & &$ | cldRe1313 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm c1dRe1323} & & & & & & & & & & & & & & & & & & &$ | cldRe1322 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm c1dRe1333} & & & & & & & & & & & & & & & & & &$ | cldRe1323 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lll} {\rm c1dRe2323} & (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dRe3323} & (\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dRe1231} & (\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_3\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dRe1223} & (\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \end{array}$ | cldRe1333 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $ \begin{array}{lll} {\rm c1dRe3323} & & & & & (\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dRe1231} & & & & & (\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_3\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dRe1223} & & & & & (\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array} $ | cldRe2223 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cldRe1231 $(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{d}_3 \gamma^{\mu} d_1)/\text{TeV}^2 + \text{h.c.}$ R cldRe1223 $(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{d}_2 \gamma^{\mu} d_3)/\text{TeV}^2 + \text{h.c.}$ R | cldRe2323 | | R |
| cldRe1231 $(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{d}_3 \gamma^{\mu} d_1)/\text{TeV}^2 + \text{h.c.}$ R cldRe1223 $(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{d}_2 \gamma^{\mu} d_3)/\text{TeV}^2 + \text{h.c.}$ R | cldRe3323 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cldRe1223 $(\bar{\ell}_1 \gamma_{\mu} \ell_2)(\bar{d}_2 \gamma^{\mu} d_3)/\text{TeV}^2 + \text{h.c.}$ R cldRe1332 $(\bar{\ell}_1 \gamma_{\mu} \ell_3)(\bar{d}_3 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ R | cldRe1231 | | R |
| cldRe1332 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ R | cldRe1223 | $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.}$ | ${ m R}$ |
| | cldRe1332 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.}$ | R |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|---|-----------|---|--------------|
| cldRe1312 | cldRe1211 | $(\bar{\ell}_1 \gamma_\mu \ell_2)(\bar{d}_1 \gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cldRe1321 $ \begin{array}{c} (\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2212} \\ (\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2213} \\ (\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2311} \\ (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2312} \\ (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2313} \\ (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2313} \\ (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2321} \\ (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2322} \\ (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2322} \\ (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe2333} \\ (\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe3312} \\ (\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe3312} \\ (\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldRe3313} \\ (\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1221} \\ i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm12332} \\ i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm12332} \\ i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1112} \\ i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1112} \\ i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1112} \\ i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1112} \\ i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1123} \\ i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1212} \\ i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1212} \\ i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1222} \\ i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1232} \\ i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1333} \\ i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1323} \\ i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1323} \\ i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cldIm1223} \\ i(\bar{\ell}_1\gamma_$ | cldRe1311 | | R |
| c1dRe2212 | cldRe1312 | | R |
| cldRe2213 | cldRe1321 | $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cldRe2311 | cldRe2212 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cldRe2213 | $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| c1dRe2313 | cldRe2311 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| c1dRe2313 | cldRe2312 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2313 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2321 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2322 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2331 | $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe2333 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe3312 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldRe3313 | $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldIm1221 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldIm1331 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldIm2332 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldIm1112 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cldIm1113 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldIm1123 | $i(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cldIm1212 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldIm1213 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cldIm1222 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cldIm1232 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cldIm1233 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cldIm1313 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cldIm1322 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lllll} {\rm c1dIm2223} & & & & & & & & & & & & & & & & & & &$ | cldIm1323 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cldIm1333 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm c1dIm3323} & & & & & & & & & & & & & & & & & & &$ | cldIm2223 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm c1dIm1231} & & & & & & & & & & & & & & & & & & &$ | cldIm2323 | | R |
| $\begin{array}{lll} {\rm c1dIm1223} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_2\gamma^\mu d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1332} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1211} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1311} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1312} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1321} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm2212} & i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cldIm3323 | | R |
| $\begin{array}{lll} {\rm c1dIm1332} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1211} & i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1311} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1312} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1321} & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm2212} & i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cldIm1231 | $i(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | cldIm1223 | | R |
| $ \begin{array}{llll} {\rm c1dIm1311} & & & & & & & & & & & & & & & & & & $ | cldIm1332 | | R |
| $\begin{array}{lll} {\rm c1dIm1312} & & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1321} & & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm2212} & & i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cldIm1211 | | R |
| $\begin{array}{lll} {\rm c1dIm1312} & & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm1321} & & i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm c1dIm2212} & & i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cldIm1311 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cldIm2212 $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ R | cldIm1312 | $i(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cldIm2212 $i(\bar{\ell}_2\gamma_{\mu}\ell_2)(\bar{d}_1\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ R cldIm2213 $i(\bar{\ell}_2\gamma_{\mu}\ell_2)(\bar{d}_1\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ R | cldIm1321 | | \mathbf{R} |
| cldIm2213 $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ R | cldIm2212 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| | cldIm2213 | $i(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |

| WC name | Operator | Type |
|-----------|---|--------------|
| cldIm2311 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cldIm2312 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cldIm2313 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cldIm2321 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cldIm2322 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cldIm2331 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cldIm2333 | $i(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cldIm3312 | $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cldIm3313 | $i(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe1111 | $(\bar{q}_1\gamma_\mu q_1)(\bar{e}_1\gamma^\mu e_1)/{\rm TeV}^2$ | \mathbf{R} |
| cqeRe1122 | $(\bar{q}_1\gamma_\mu q_1)(\bar{e}_2\gamma^\mu e_2)/{\rm TeV}^2$ | R |
| cqeRe1133 | $(\bar{q}_1\gamma_\mu q_1)(\bar{e}_3\gamma^\mu e_3)/\text{TeV}^2$ | \mathbf{R} |
| cqeRe2222 | $(ar{q}_2\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_2)/\mathrm{TeV}^2$ | \mathbf{R} |
| cqeRe2233 | $(\bar{q}_2\gamma_\mu q_2)(\bar{e}_3\gamma^\mu e_3)/{ m TeV}^2$ | \mathbf{R} |
| cqeRe3333 | $(\bar{q}_3\gamma_\mu q_3)(\bar{e}_3\gamma^\mu e_3)/{\rm TeV}^2$ | R |
| cqeRe1221 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{e}_2 \gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe1331 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe2332 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe2211 | $(\bar{q}_2\gamma_\mu q_2)(\bar{e}_1\gamma^\mu e_1)/{ m TeV}^2$ | R |
| cqeRe3311 | $(\bar{q}_3\gamma_\mu q_3)(\bar{e}_1\gamma^\mu e_1)/{ m TeV}^2$ | R |
| cqeRe3322 | $(\bar{q}_3\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_2)/{\rm TeV}^2$ | R |
| cqeRe1112 | $(\bar{q}_1 \gamma_{\mu} q_1)(\bar{e}_1 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1113 | $(\bar{q}_1 \gamma_{\mu} q_1)(\bar{e}_1 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1123 | $(\bar{q}_1\gamma_{\mu}q_1)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1212 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{e}_1 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1213 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{e}_1 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqeRe1222 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{e}_2 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqeRe1232 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{e}_3 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1233 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{e}_3 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1313 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{e}_1 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1322 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{e}_2 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe1323 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{e}_2 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1333 | $(\bar{q}_1\gamma_\mu q_3)(\bar{e}_3\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe2223 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{e}_2 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqeRe2323 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe3323 | $(\bar{q}_3 \gamma_{\mu} q_3)(\bar{e}_2 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1231 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{e}_3 \gamma^{\mu} e_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqeRe1223 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{e}_2 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe1332 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{e}_3 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1211 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{e}_1 \gamma^{\mu} e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe1311 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{e}_1 \gamma^{\mu} e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe1312 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{e}_1 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| WC name | Operator | Type |
|-----------|---|--------------|
| cqeRe1321 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{e}_2 \gamma^{\mu} e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe2212 | $(\bar{q}_2 \gamma_{\mu} q_2)(\bar{e}_1 \gamma^{\mu} e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe2213 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{e}_1 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe2311 | $(\bar{q}_2 \gamma_{\mu} q_3)(\bar{e}_1 \gamma^{\mu} e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe2312 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe2313 | $(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe2321 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe2322 | $(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_2\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe2331 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe2333 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeRe3312 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeRe3313 | $(\bar{q}_3 \gamma_{\mu} q_3)(\bar{e}_1 \gamma^{\mu} e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm1221 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{e}_2\gamma^{\mu}e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm1331 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{e}_3\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm2332 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm1112 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{e}_1\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1113 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1123 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1212 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm1213 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1222 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{e}_2\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm1232 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{e}_3\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm1233 | $i(\bar{q}_1\gamma_\mu q_2)(\bar{e}_3\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1313 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1322 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm1323 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1333 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqeIm2223 | $i(\bar{q}_2\gamma_\mu q_2)(\bar{e}_2\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm2323 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm3323 | $i(\bar{q}_3\gamma_{\mu}q_3)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1231 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{e}_3\gamma^{\mu}e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1223 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{e}_2\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1332 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{e}_3\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1211 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1311 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{e}_1\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1312 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_1\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm1321 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_2\gamma^{\mu}e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm2212 | $i(\bar{q}_2\gamma_\mu q_2)(\bar{e}_1\gamma^\mu e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm2213 | $i(\bar{q}_2\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm2311 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_1\gamma^{\mu}e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm2312 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_1\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm2313 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{e}_1\gamma^\mu e_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| WC name | Operator | Type |
|------------|---|--------------|
| cqeIm2321 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm2322 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_2\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm2331 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqeIm2333 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm3312 | $i(\bar{q}_3\gamma_{\mu}q_3)(\bar{e}_1\gamma^{\mu}e_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqeIm3313 | $i(\bar{q}_3\gamma_{\mu}q_3)(\bar{e}_1\gamma^{\mu}e_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1111 | $(\bar{q}_1\gamma_\mu q_1)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ | R |
| cqu1Re1122 | $(\bar{q}_1\gamma_\mu q_1)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2$ | R |
| cqu1Re1133 | $(\bar{q}_1\gamma_\mu q_1)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ | \mathbf{R} |
| cqu1Re2222 | $(\bar{q}_2\gamma_\mu q_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2$ | \mathbf{R} |
| cqu1Re2233 | $(\bar{q}_2\gamma_\mu q_2)(\bar{u}_3\gamma^\mu u_3)/{\rm TeV}^2$ | R |
| cqu1Re3333 | $(\bar{q}_3\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2$ | R |
| cqu1Re1221 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{u}_2 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re1331 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re2332 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re2211 | $(\bar{q}_2\gamma_\mu q_2)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2$ | \mathbf{R} |
| cqu1Re3311 | $(\bar{q}_3\gamma_\mu q_3)(\bar{u}_1\gamma^\mu u_1)/{\rm TeV}^2$ | \mathbf{R} |
| cqu1Re3322 | $(\bar{q}_3\gamma_\mu q_3)(\bar{u}_2\gamma^\mu u_2)/{\rm TeV}^2$ | \mathbf{R} |
| cqu1Re1112 | $(\bar{q}_1 \gamma_{\mu} q_1)(\bar{u}_1 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1113 | $(\bar{q}_1 \gamma_{\mu} q_1)(\bar{u}_1 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re1123 | $(\bar{q}_1\gamma_{\mu}q_1)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1212 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{u}_1 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1213 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1222 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1232 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_3 \gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1233 | $(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1313 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu1Re1322 | $(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1323 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1333 | $(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re2223 | $(\bar{q}_2\gamma_{\mu}q_2)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re2323 | $(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re3323 | $(\bar{q}_3\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1231 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{u}_3 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1223 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{u}_2 \gamma^{\mu} u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re1332 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1211 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{u}_1 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1311 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{u}_1 \gamma^{\mu} u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re1312 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{u}_1 \gamma^{\mu} u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re1321 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re2212 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re2213 | $(\bar{q}_2\gamma_{\mu}q_2)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|------------|--|--------------|
| cqu1Re2311 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re2312 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re2313 | $(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re2321 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re2322 | $(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re2331 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re2333 | $(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Re3312 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Re3313 | $(\bar{q}_3\gamma_{\mu}q_3)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Im1221 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_2\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Im1331 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_3\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Im2332 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_3\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Im1112 | $i(\bar{q}_1\gamma_\mu q_1)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1113 | $i(\bar{q}_1\gamma_\mu q_1)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1123 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Im1212 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_1\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1213 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1222 | $i(\bar{q}_1\gamma_\mu q_2)(\bar{u}_2\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1232 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_3\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1233 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1313 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1322 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1323 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1333 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_3\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu1Im2223 | $i(\bar{q}_2\gamma_\mu q_2)(\bar{u}_2\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im2323 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im3323 | $i(\bar{q}_3\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1231 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_3\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1223 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_2\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1332 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_3\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu1Im1211 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{u}_1\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu1Im1311 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu1Im1312 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im1321 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu1Im2212 | $i(\bar{q}_2\gamma_\mu q_2)(\bar{u}_1\gamma^\mu u_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu1Im2213 | $i(\bar{q}_2\gamma_{\mu}q_2)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu1Im2311 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{u}_1\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im2312 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_1\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im2313 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_1\gamma^{\mu}u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im2321 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{u}_2\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im2322 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{u}_2\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im2331 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_1)/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|------------|--|--------------|
| cqu1Im2333 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im3312 | $i(\bar{q}_3\gamma_{\mu}q_3)(\bar{u}_1\gamma^{\mu}u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu1Im3313 | $i(\bar{q}_3\gamma_\mu q_3)(\bar{u}_1\gamma^\mu u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1111 | $(\bar{q}_1\gamma_\mu T^Aq_1)(\bar{u}_1\gamma^\mu T^Au_1)/\text{TeV}^2$ | ${ m R}$ |
| cqu8Re1122 | $(\bar{q}_1\gamma_\mu T^A q_1)(\bar{u}_2\gamma^\mu T^A u_2)/\text{TeV}^2$ | ${ m R}$ |
| cqu8Re1133 | $(\bar{q}_1\gamma_\mu T^A q_1)(\bar{u}_3\gamma^\mu T^A u_3)/\text{TeV}^2$ | ${ m R}$ |
| cqu8Re2222 | $(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{u}_2\gamma^\mu T^Au_2)/\text{TeV}^2$ | ${ m R}$ |
| cqu8Re2233 | $(\bar{q}_2\gamma_\mu T^A q_2)(\bar{u}_3\gamma^\mu T^A u_3)/\text{TeV}^2$ | R |
| cqu8Re3333 | $(\bar{q}_{3}\gamma_{\mu}T^{A}q_{3})(\bar{u}_{3}\gamma^{\mu}T^{A}u_{3})/\text{TeV}^{2}$ | ${ m R}$ |
| cqu8Re1221 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{u}_2 \gamma^{\mu} T^A u_1) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1331 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_3 \gamma^{\mu} T^A u_1) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re2332 | $(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{u}_3\gamma^{\mu}T^Au_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re2211 | $(\bar{q}_2\gamma_\mu T^A q_2)(\bar{u}_1\gamma^\mu T^A u_1)/\text{TeV}^2$ | ${ m R}$ |
| cqu8Re3311 | $(\bar{q}_3\gamma_\mu T^A q_3)(\bar{u}_1\gamma^\mu T^A u_1)/\text{TeV}^2$ | ${ m R}$ |
| cqu8Re3322 | $(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{u}_2\gamma^\mu T^Au_2)/\text{TeV}^2$ | ${ m R}$ |
| cqu8Re1112 | $(\bar{q}_1 \gamma_{\mu} T^A q_1) (\bar{u}_1 \gamma^{\mu} T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1113 | $(\bar{q}_1 \gamma_{\mu} T^A q_1) (\bar{u}_1 \gamma^{\mu} T^A u_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1123 | $(\bar{q}_1 \gamma_{\mu} T^A q_1) (\bar{u}_2 \gamma^{\mu} T^A u_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1212 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{u}_1 \gamma^{\mu} T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1213 | $(\bar{q}_1 \gamma_{\mu} T^A q_2)(\bar{u}_1 \gamma^{\mu} T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1222 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{u}_2 \gamma^{\mu} T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1232 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{u}_3 \gamma^{\mu} T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1233 | $(\bar{q}_1 \gamma_{\mu} T^A q_2)(\bar{u}_3 \gamma^{\mu} T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1313 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_1 \gamma^{\mu} T^A u_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1322 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_2 \gamma^{\mu} T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1323 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_2 \gamma^{\mu} T^A u_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1333 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_3 \gamma^{\mu} T^A u_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re2223 | $(\bar{q}_2 \gamma_\mu T^A q_2)(\bar{u}_2 \gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re2323 | $(\bar{q}_2 \gamma_\mu T^A q_3)(\bar{u}_2 \gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re3323 | $(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{u}_2\gamma^{\mu}T^Au_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1231 | $(\bar{q}_1 \gamma_{\mu} T^A q_2)(\bar{u}_3 \gamma^{\mu} T^A u_1) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1223 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{u}_2 \gamma^{\mu} T^A u_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1332 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_3 \gamma^{\mu} T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1211 | $(\bar{q}_1 \gamma_\mu T^A q_2)(\bar{u}_1 \gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1311 | $(\bar{q}_1 \gamma_\mu T^A q_3)(\bar{u}_1 \gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1312 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_1 \gamma^{\mu} T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re1321 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_2 \gamma^{\mu} T^A u_1) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqu8Re2212 | $(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{u}_1 \gamma^\mu T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Re2213 | $(\bar{q}_2 \gamma_\mu T^A q_2)(\bar{u}_1 \gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Re2311 | $(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Re2312 | $(\bar{q}_2 \gamma_{\mu} T^A q_3) (\bar{u}_1 \gamma^{\mu} T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Re2313 | $(\bar{q}_2 \gamma_\mu T^A q_3)(\bar{u}_1 \gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| WC name | Operator | Type |
|------------|--|--------------|
| cqu8Re2321 | $(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Re2322 | $(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Re2331 | $(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Re2333 | $(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Re3312 | $(\bar{q}_3 \gamma_\mu T^A q_3)(\bar{u}_1 \gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Re3313 | $(\bar{q}_3 \gamma_\mu T^A q_3)(\bar{u}_1 \gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Im1221 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{u}_2\gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Im1331 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{u}_3\gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Im2332 | $i(\bar{q}_2\gamma_\mu T^A q_3)(\bar{u}_3\gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1112 | $i(\bar{q}_1\gamma_\mu T^A q_1)(\bar{u}_1\gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Im1113 | $i(\bar{q}_1\gamma_\mu T^A q_1)(\bar{u}_1\gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Im1123 | $i(\bar{q}_1\gamma_\mu T^A q_1)(\bar{u}_2\gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Im1212 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{u}_1\gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1213 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{u}_1\gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Im1222 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{u}_2\gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1232 | $i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{u}_3\gamma^{\mu}T^Au_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1233 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{u}_3\gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1313 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{u}_1\gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1322 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{u}_2\gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1323 | $i(\bar{q}_1\gamma_{\mu}T^Aq_3)(\bar{u}_2\gamma^{\mu}T^Au_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1333 | $i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{u}_3\gamma^\mu T^Au_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2223 | $i(\bar{q}_2\gamma_\mu T^A q_2)(\bar{u}_2\gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2323 | $i(\bar{q}_2\gamma_\mu T^A q_3)(\bar{u}_2\gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im3323 | $i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{u}_2\gamma^\mu T^Au_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1231 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{u}_3\gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1223 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{u}_2\gamma^\mu T^A u_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1332 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{u}_3\gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1211 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{u}_1\gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1311 | $i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{u}_1\gamma^\mu T^Au_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1312 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{u}_1\gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im1321 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{u}_2\gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2212 | $i(\bar{q}_2\gamma_\mu T^A q_2)(\bar{u}_1\gamma^\mu T^A u_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2213 | $i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{u}_1\gamma^\mu T^Au_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2311 | $i(\bar{q}_2\gamma_\mu T^A q_3)(\bar{u}_1\gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2312 | $i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{u}_1\gamma^\mu T^Au_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2313 | $i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{u}_1\gamma^\mu T^Au_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2321 | $i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{u}_2\gamma^{\mu}T^Au_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2322 | $i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{u}_2\gamma^{\mu}T^Au_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im2331 | $i(\bar{q}_2\gamma_\mu T^A q_3)(\bar{u}_3\gamma^\mu T^A u_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqu8Im2333 | $i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{u}_3\gamma^{\mu}T^Au_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im3312 | $i(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{u}_1\gamma^{\mu}T^Au_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqu8Im3313 | $i(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{u}_1\gamma^{\mu}T^Au_3)/\text{TeV}^2 + \text{h.c.}$ | R |

| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | WC name | Operator | Type |
|---|------------|--|--------------|
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1111 | $(ar{q}_1\gamma_\mu q_1)(ar{d}_1\gamma^\mu d_1)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1122 | $(ar{q}_1\gamma_\mu q_1)(ar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1133 | $(\bar{q}_1\gamma_\mu q_1)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re2222 | $(ar{q}_2\gamma_\mu q_2)(ar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re2233 | $(\bar{q}_2\gamma_\mu q_2)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd1Re3333 | $(\bar{q}_3\gamma_\mu q_3)(\bar{d}_3\gamma^\mu d_3)/{ m TeV}^2$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1221 | $(\bar{q}_1 \gamma_{\mu} q_2) (\bar{d}_2 \gamma^{\mu} d_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1331 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{d}_3 \gamma^{\mu} d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd1Re2332 | $(\bar{q}_2 \gamma_\mu q_3) (d_3 \gamma^\mu d_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re2211 | $(\bar{q}_2\gamma_\mu q_2)(\bar{d}_1\gamma^\mu d_1)/{ m TeV}^2$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re3311 | $(\bar{q}_3\gamma_\mu q_3)(d_1\gamma^\mu d_1)/{\rm TeV}^2$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd1Re3322 | $(ar{q}_3\gamma_\mu q_3)(ar{d}_2\gamma^\mu d_2)/{ m TeV}^2$ | ${ m R}$ |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd1Re1112 | $(\bar{q}_1 \gamma_{\mu} q_1) (d_1 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1113 | $(\bar{q}_1 \gamma_{\mu} q_1) (\bar{d}_1 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1123 | $(\bar{q}_1 \gamma_{\mu} q_1) (\bar{d}_2 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1212 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{d}_1 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1213 | $(\bar{q}_1 \gamma_{\mu} q_2) (\bar{d}_1 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd1Re1232} & & & & & & & & & & & & & & & & & & &$ | cqd1Re1222 | $(\bar{q}_1 \gamma_{\mu} q_2) (d_2 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1232 | $(\bar{q}_1 \gamma_{\mu} q_2)(\bar{d}_3 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1233 | $(\bar{q}_1 \gamma_{\mu} q_2) (d_3 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lllll} {\rm cqd1Re1322} & & & & & & & & & & & & & & & & & & $ | cqd1Re1313 | $(\bar{q}_1 \gamma_{\mu} q_3) (d_1 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1322 | $(\bar{q}_1 \gamma_{\mu} q_3) (\bar{d}_2 \gamma^{\mu} d_2) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1323 | $(\bar{q}_1 \gamma_{\mu} q_3)(\bar{d}_2 \gamma^{\mu} d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re1333 | $(\bar{q}_1 \gamma_{\mu} q_3) (\bar{d}_3 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd1Re2223 | $(\bar{q}_2\gamma_\mu q_2)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd1Re3323} & & & & & & & & & & & & & & & & & & &$ | cqd1Re2323 | $(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lllll} {\rm cqd1Re1231} & & & & & & & & & & & & & & & & & & &$ | cqd1Re3323 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{d}_2 \gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llll} {\rm cqd1Re1332} & & & & & & & & & & & & & & & & & & &$ | cqd1Re1231 | $(\bar{q}_1 \gamma_{\mu} q_2) (\bar{d}_3 \gamma^{\mu} d_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd1Re1332} & & & & & & & & & & & & & & & & & & &$ | cqd1Re1223 | $(\bar{q}_1 \gamma_{\mu} q_2) (\bar{d}_2 \gamma^{\mu} d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd1Re1211} & & & & & & & & & & & & & & & & & & $ | cqd1Re1332 | $(\bar{q}_1\gamma_\mu q_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd1Re1311} & & & & & & & & & & & & & & & & & & $ | cqd1Re1211 | $(\bar{q}_1 \gamma_{\mu} q_2) (\bar{d}_1 \gamma^{\mu} d_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd1Re1312} & & & & & & & & & & & & & & & & & & &$ | cqd1Re1311 | $(\bar{q}_1 \gamma_{\mu} q_3) (\bar{d}_1 \gamma^{\mu} d_1) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llll} {\rm cqd1Re1321} & & & & & & & & & & & & & & & & & & \\ {\rm cqd1Re2212} & & & & & & & & & & & & & & & & & \\ {\rm cqd1Re2212} & & & & & & & & & & & & & & & & \\ {\rm cqd1Re2213} & & & & & & & & & & & & & & & & \\ {\rm cqd1Re2213} & & & & & & & & & & & & & \\ {\rm cqd1Re2311} & & & & & & & & & & & & & \\ {\rm cqd1Re2311} & & & & & & & & & & & & & \\ {\rm cqd1Re2312} & & & & & & & & & & & & & \\ {\rm cqd1Re2312} & & & & & & & & & & & & & \\ {\rm cqd1Re2313} & & & & & & & & & & & & \\ {\rm cqd1Re2313} & & & & & & & & & & & & \\ {\rm cqd1Re2321} & & & & & & & & & & & \\ {\rm cqd1Re2321} & & & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & \\ {\rm cqd1Re2322} & & & & \\ {\rm cqd1Re2322} & & & & \\ {\rm cqd1Re2322} & & & \\ {\rm cqd1Re2322} & & & & \\ {\rm cqd1Re2322} & & & \\ {\rm cqd1Re2322} & & & & \\ {\rm cqd1Re2322} & & \\ {\rm c$ | cqd1Re1312 | $(\bar{q}_1\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd1Re2212} & & & & & & & & & & & & & & & & & & \\ {\rm cqd1Re2213} & & & & & & & & & & & & & & & & & \\ {\rm cqd1Re2213} & & & & & & & & & & & & & & & & \\ {\rm cqd1Re2311} & & & & & & & & & & & & & & & \\ {\rm cqd1Re2311} & & & & & & & & & & & & & & \\ {\rm cqd1Re2312} & & & & & & & & & & & & & \\ {\rm cqd1Re2312} & & & & & & & & & & & & & \\ {\rm cqd1Re2313} & & & & & & & & & & & & & \\ {\rm cqd1Re2313} & & & & & & & & & & & & & \\ {\rm cqd1Re2321} & & & & & & & & & & & & \\ {\rm cqd1Re2321} & & & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & \\ {\rm cqd1Re2322} & & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & & & & \\ {\rm cqd1Re2322} & & & & \\ {\rm cqd1Re2322} & & & & & \\ {\rm cqd1Re2322} & $ | cqd1Re1321 | $(\bar{q}_1 \gamma_{\mu} q_3) (d_2 \gamma^{\mu} d_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} {\rm cqd1Re2213} & & & & & & & & & & & & & & & & & & &$ | cqd1Re2212 | $(\bar{q}_2\gamma_\mu q_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lll} {\rm cqd1Re2311} & & & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_1\gamma^{\mu}d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd1Re2312} & & & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_1\gamma^{\mu}d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd1Re2313} & & & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_1\gamma^{\mu}d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd1Re2321} & & & & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd1Re2322} & & & & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cqd1Re2213 | $(\bar{q}_2 \gamma_\mu q_2) (\bar{d}_1 \gamma^\mu d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} {\rm cqd1Re2313} & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_1\gamma^{\mu}d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd1Re2321} & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd1Re2322} & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \end{array}$ | cqd1Re2311 | $(\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_1\gamma^{\mu}d_1)/{\rm TeV}^2 + {\rm h.c.}$ | ${ m R}$ |
| $\begin{array}{lll} {\rm cqd1Re2313} & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_1\gamma^{\mu}d_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd1Re2321} & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd1Re2322} & & (\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \end{array}$ | cqd1Re2312 | $(\bar{q}_2\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Re2321 $(\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ R cqd1Re2322 $(\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ R | cqd1Re2313 | $(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_3) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqd1Re2322 $(\bar{q}_2 \gamma_{\mu} q_3)(\bar{d}_2 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ R | cqd1Re2321 | $(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Re2331 $(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_1) / \text{TeV}^2 + \text{h.c.}$ R | cqd1Re2322 | $(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_2) / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| | cqd1Re2331 | $(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_1) / \text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|------------|--|--------------|
| cqd1Re2333 | $(\bar{q}_2\gamma_\mu q_3)(\bar{d}_3\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Re3312 | $(\bar{q}_3\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Re3313 | $(\bar{q}_3\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1221 | $i(\bar{q}_1\gamma_\mu q_2)(\bar{d}_2\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd1Im1331 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd1Im2332 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{d}_3\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd1Im1112 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{d}_1\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1113 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{d}_1\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1123 | $i(\bar{q}_1\gamma_{\mu}q_1)(\bar{d}_2\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1212 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{d}_1\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1213 | $i(\bar{q}_1\gamma_\mu q_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1222 | $i(\bar{q}_1 \gamma_{\mu} q_2)(\bar{d}_2 \gamma^{\mu} d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1232 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{d}_3\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1233 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{d}_3\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1313 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1322 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd1Im1323 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1333 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{d}_3\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd1Im2223 | $i(\bar{q}_2\gamma_{\mu}q_2)(\bar{d}_2\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im2323 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{d}_2\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im3323 | $i(\bar{q}_3\gamma_{\mu}q_3)(d_2\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1231 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{d}_3\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1223 | $i(\bar{q}_1\gamma_{\mu}q_2)(\bar{d}_2\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1332 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{d}_3\gamma^{\mu}d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1211 | $i(\bar{q}_1\gamma_\mu q_2)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1311 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1312 | $i(\bar{q}_1\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im1321 | $i(\bar{q}_1\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqd1Im2212 | $i(\bar{q}_2\gamma_\mu q_2)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im2213 | $i(\bar{q}_2\gamma_\mu q_2)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd1Im2311 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im2312 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im2313 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_3)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqd1Im2321 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_2\gamma^{\mu}d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im2322 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{d}_2\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im2331 | $i(\bar{q}_2\gamma_\mu q_3)(\bar{d}_3\gamma^\mu d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im2333 | $i(\bar{q}_2\gamma_{\mu}q_3)(\bar{d}_3\gamma^{\mu}d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im3312 | $i(\bar{q}_3\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd1Im3313 | $i(ar{q}_3\gamma_\mu q_3)(ar{d}_1ar{\gamma}^\mu d_3)/\mathrm{TeV}^2 + \mathrm{h.c.}$ | \mathbf{R} |
| cqd8Re1111 | $(ar{q}_1\gamma_\mu T^Aq_1)(ar{d}_1\gamma^\mu T^Ad_1)/{ m TeV}^2$ | \mathbf{R} |
| cqd8Re1122 | $(\bar{q}_1\gamma_\mu T^A q_1)(\bar{d}_2\gamma^\mu T^A d_2)/{ m TeV}^2$ | R |
| cqd8Re1133 | $(\bar{q}_1\gamma_{\mu}T^Aq_1)(\bar{d}_3\gamma^{\mu}T^Ad_3)/\text{TeV}^2$ | R |

| WC name | Operator | Type |
|------------|--|--------------|
| cqd8Re2222 | $(\bar{q}_2\gamma_\mu T^A q_2)(\bar{d}_2\gamma^\mu T^A d_2)/\text{TeV}^2$ | R |
| cqd8Re2233 | $(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_3)/\text{TeV}^2$ | R |
| cqd8Re3333 | $(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/\text{TeV}^2$ | R |
| cqd8Re1221 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{d}_2 \gamma^{\mu} T^A d_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re1331 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{d}_3 \gamma^{\mu} T^A d_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re2332 | $(\bar{q}_2 \gamma_{\mu} T^A q_3) (\bar{d}_3 \gamma^{\mu} T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re2211 | $(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_1)/\text{TeV}^2$ | R |
| cqd8Re3311 | $(\bar{q}_3\gamma_\mu T^A q_3)(\bar{d}_1\gamma^\mu T^A d_1)/{\rm TeV}^2$ | \mathbf{R} |
| cqd8Re3322 | $(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_2)/\text{TeV}^2$ | R |
| cqd8Re1112 | $(\bar{q}_1\gamma_\mu T^A q_1)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1113 | $(\bar{q}_1 \gamma_{\mu} T^A q_1) (\bar{d}_1 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1123 | $(\bar{q}_1 \gamma_{\mu} T^A q_1) (\bar{d}_2 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re1212 | $(\bar{q}_1\gamma_\mu T^A q_2)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1213 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{d}_1 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1222 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{d}_2 \gamma^{\mu} T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re1232 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{d}_3 \gamma^{\mu} T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re1233 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{d}_3 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1313 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{d}_1 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re1322 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{d}_2 \gamma^{\mu} T^A d_2) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re1323 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{d}_2 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1333 | $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{d}_3 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re2223 | $(\bar{q}_2 \gamma_{\mu} T^A q_2) (\bar{d}_2 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re2323 | $(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re3323 | $(\bar{q}_3 \gamma_{\mu} T^A q_3) (\bar{d}_2 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1231 | $(\bar{q}_1 \gamma_{\mu} T^A q_2) (\bar{d}_3 \gamma^{\mu} T^A d_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re1223 | $(\bar{q}_1\gamma_\mu T^A q_2)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1332 | $(\bar{q}_1\gamma_\mu T^A q_3)(\bar{d}_3\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1211 | $(\bar{q}_1\gamma_\mu T^A q_2)(\bar{d}_1\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1311 | $(\bar{q}_1\gamma_\mu T^A q_3)(\bar{d}_1\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re1312 | $(\bar{q}_1\gamma_\mu T^A q_3)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re1321 | $(\bar{q}_1\gamma_\mu T^A q_3)(\bar{d}_2\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re2212 | $(\bar{q}_2\gamma_\mu T^A q_2)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re2213 | $(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{d}_1 \gamma^\mu T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re2311 | $(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_1) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re2312 | $(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re2313 | $(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re2321 | $(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_2\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re2322 | $(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_2\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cqd8Re2331 | $(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_3 \gamma^\mu T^A d_1) / \text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re2333 | $(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_3\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| cqd8Re3312 | $(\bar{q}_3\gamma_\mu T^A q_3)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cqd8Re3313 | $(\bar{q}_3 \gamma_{\mu} T^A q_3) (\bar{d}_1 \gamma^{\mu} T^A d_3) / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |

| $\begin{array}{llll} {\rm cqd8Im1221} & & & & & & & & & & & & & & & & & & &$ | WC name | Operator | Type |
|--|-------------|--|--------------|
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im1221 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im1331 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im2332 | $i(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_3\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im1112 | $i(\bar{q}_1\gamma_\mu T^A q_1)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im1113 | $i(\bar{q}_1\gamma_\mu T^A q_1)(\bar{d}_1\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} \operatorname{cqd8Im1213} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_1\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1222} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_2\gamma^{\mu}T^Ad_2)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1232} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_3\gamma^{\mu}T^Ad_2)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1233} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_3\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1313} & i(\bar{q}_1\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1322} & i(\bar{q}_1\gamma_{\mu}T^Aq_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1323} & i(\bar{q}_1\gamma_{\mu}T^Aq_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1323} & i(\bar{q}_1\gamma_{\mu}T^Aq_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im2223} & i(\bar{q}_2\gamma_{\mu}T^Aq_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im3323} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im12323} & i(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1231} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1232} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1233} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_2\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1332} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1332} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_1\gamma^{\mu}T^Ad_1)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1311} & i(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{d}_1\gamma^{\mu}T^Ad_1)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1312} & i(\bar{q}_1\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_1)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im1312} & i(\bar{q}_1\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im2212} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im2213} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im2213} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im2331} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im2331} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/\operatorname{TeV}^2 + \operatorname{h.c.} & \operatorname{R} \\ \operatorname{cqd8Im2331} & i($ | cqd8Im1123 | $i(\bar{q}_1\gamma_\mu T^A q_1)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im1212 | | R |
| $\begin{array}{llll} {\rm cqd8Im1232} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1233} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1313} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1322} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1323} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1323} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1323} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2223} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2223} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3233} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3233} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1231} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1322} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1332} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1311} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1312} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2212} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2213} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2213} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2311} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2322} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2323} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2323} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm $ | cqd8Im1213 | | ${ m R}$ |
| $\begin{array}{llll} {\rm cqd8Im1233} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1313} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1322} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1323} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1333} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2223} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2323} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3323} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1231} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1223} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1232} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1332} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1332} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1311} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2312} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2212} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2212} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2313} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2313} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2313} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2313} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2323} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm $ | cqd8Im1222 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{d}_2\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im1232 | $i(\bar{q}_1\gamma_\mu T^A q_2)(\bar{d}_3\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im1233 | | R |
| $\begin{array}{llll} {\rm cqd8Im1323} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1333} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2223} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2323} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3323} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1231} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_3\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1223} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1223} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_2\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1322} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1332} & i(\bar{q}_1\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1311} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im1312} & i(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2212} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2212} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2213} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2311} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2312} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2322} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3312} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1111} & (\bar{\ell}_1^1e_1)(\bar{d}_1q_1^1)/{\rm TeV}^2 + {$ | cqd8Im1313 | | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im1322 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im1323 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im1333 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{d}_3\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im2223 | $i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_2\gamma^\mu T^Ad_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im2323 | $i(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im3323 | $i(\bar{q}_3\gamma_\mu T^A q_3)(\bar{d}_2\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im1231 | | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im1223 | | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im1332 | | ${ m R}$ |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cqd8Im1211 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cqd8Im1311 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{d}_1\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd8Im2212} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2213} & i(\bar{q}_2\gamma_\mu T^Aq_2)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2311} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2312} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2313} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2321} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2322} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2331} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3312} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1111} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1112} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1113} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^$ | cqd8Im1312 | | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd8Im2213} & & & & & & & & & & & & & & & & & & &$ | cqd8Im1321 | $i(\bar{q}_1\gamma_\mu T^A q_3)(\bar{d}_2\gamma^\mu T^A d_1)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lllll} {\rm cqd8Im2311} & & & & & & & & & & & & & & & & & & $ | cqd8Im2212 | $i(\bar{q}_2\gamma_\mu T^A q_2)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llll} {\rm cqd8Im2312} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2313} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2321} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2322} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2331} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3312} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1111} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1112} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1113} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_3^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{\ell}_1^Ie_1)(\bar{\ell}_1^Ie_1$ | cqd8Im2213 | | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd8Im2313} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2321} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2322} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2331} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3312} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1111} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1112} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_3^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} $ | cqd8Im2311 | $i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd8Im2321} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2322} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2331} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3312} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1111} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1112} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1113} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_3^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{\ell}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{\ell}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{\ell}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{\ell}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{\ell}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{\ell}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ $ | cqd8Im2312 | $i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llll} {\rm cqd8Im2322} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_2\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2331} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_3\gamma^{\mu}T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2333} & i(\bar{q}_2\gamma_{\mu}T^Aq_3)(\bar{d}_3\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3312} & i(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1111} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1112} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1113} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_3^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{\ell}_2^Ie_1)(\bar{\ell}_2^Ie_1)/{\rm cledqRe122} & {\rm cledqRe1222} & {\rm cledqRe1222} & {\rm cledqRe1222} & {\rm cledqRe1222} & {\rm cl$ | cqd8Im2313 | $i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cqd8Im2331} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_1)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im2333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3312} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1111} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1112} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1113} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_3^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cqd8Im2321 | $i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_2\gamma^\mu T^Ad_1)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} {\rm cqd8Im2333} & i(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_3\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3312} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1111 & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1112 & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1113 & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_3^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1121 & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1122 & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe}1122 & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cqd8Im2322 | $i(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_2\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cqd8Im3312} & i(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cqd8Im3313} & i(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1111} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1112} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1113} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_3^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | | | |
| $\begin{array}{lll} {\rm cqd8Im3313} & i(\bar{q}_3\gamma_{\mu}T^Aq_3)(\bar{d}_1\gamma^{\mu}T^Ad_3)/{\rm TeV}^2 + {\rm h.c.} } & {\rm R} \\ {\rm cledqRe1111} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_1^I)/{\rm TeV}^2 + {\rm h.c.} } & {\rm R} \\ {\rm cledqRe1112} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_2^I)/{\rm TeV}^2 + {\rm h.c.} } & {\rm R} \\ {\rm cledqRe1113} & (\bar{\ell}_1^Ie_1)(\bar{d}_1q_3^I)/{\rm TeV}^2 + {\rm h.c.} } & {\rm R} \\ {\rm cledqRe1121} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_1^I)/{\rm TeV}^2 + {\rm h.c.} } & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} } & {\rm R} \\ {\rm cledqRe1122} & (\bar{\ell}_1^Ie_1)(\bar{d}_2q_2^I)/{\rm TeV}^2 + {\rm h.c.} } & {\rm R} \\ \end{array}$ | cqd8Im2333 | $i(\bar{q}_2\gamma_\mu T^A q_3)(\bar{d}_3\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $ \begin{array}{llll} \text{cledqRe1111} & & & & & & & & & & & & & & & & & $ | cqd8Im3312 | $i(\bar{q}_3\gamma_\mu T^A q_3)(\bar{d}_1\gamma^\mu T^A d_2)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\tt cledqRe1112} & & & & & & & & & & & & & & & & & & \\ {\tt cledqRe1113} & & & & & & & & & & & & & & & & & \\ {\tt cledqRe1113} & & & & & & & & & & & & & & & & \\ {\tt cledqRe1121} & & & & & & & & & & & & & & & \\ {\tt cledqRe1121} & & & & & & & & & & & & & & & \\ {\tt cledqRe1122} & & & & & & & & & & & & & & \\ {\tt cledqRe1122} & & & & & & & & & & & & & \\ {\tt Re1} & & & & & & & & & & & & & \\ {\tt cledqRe1122} & & & & & & & & & & & & & \\ {\tt Re1} & & & & & & & & & & & & \\ {\tt cledqRe1122} & & & & & & & & & & & & \\ {\tt Re1} & & & & & & & & & & & & \\ {\tt cledqRe1122} & & & & & & & & & & & & \\ {\tt Re1} & & & & & & & & & & & \\ {\tt cledqRe1122} & & & & & & & & & & \\ {\tt Re2} & & & & & & & & & & & \\ {\tt cledqRe1122} & & & & & & & & & \\ {\tt Re2} & & & & & & & & & & \\ {\tt cledqRe1122} & & & & & & & & & \\ {\tt cledqRe2} & & & & & & & & & \\ {\tt cledqRe3} & & & & & & & & \\ {\tt cledqRe3} & & & & & & & & \\ {\tt cledqRe3} & & & & & & & & \\ {\tt cledqRe3} & & & & & & & \\ {\tt cledqRe3} & & & & & & & \\ {\tt cledqRe3} & & & & & & & \\ {\tt cledqRe3} & & & & & & \\ {\tt cledqRe3} & & & & & & & \\ {\tt cledqRe3} & & & & & & \\ {\tt cledqRe3} & & & & & & \\ {\tt cledqRe3} & & & & & \\ {\tt cledqRe3} & & & & & & \\ {\tt cledqRe3} & & & & \\ {\tt cledqRe3} & & & & & \\ {\tt cledqRe3} & & & & & \\ {\tt cledqRe3} & & & \\ {\tt cledqRe3} & & & \\ {\tt cledqRe3} & & & & \\ {\tt cledqRe3} & & $ | cqd8Im3313 | $i(\bar{q}_3\gamma_\mu T^A q_3)(\bar{d}_1\gamma^\mu T^A d_3)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cledqRe1113 $(\bar{\ell}_{1}^{\bar{I}}e_{1})(\bar{d}_{1}q_{3}^{\bar{I}})/\text{TeV}^{2} + \text{h.c.}$ R cledqRe1121 $(\bar{\ell}_{1}^{\bar{I}}e_{1})(\bar{d}_{2}q_{1}^{\bar{I}})/\text{TeV}^{2} + \text{h.c.}$ R cledqRe1122 $(\bar{\ell}_{1}^{\bar{I}}e_{1})(\bar{d}_{2}q_{2}^{\bar{I}})/\text{TeV}^{2} + \text{h.c.}$ R | cledqRe1111 | | R |
| cledqRe1121 $(\bar{\ell}_{1}^{I}e_{1})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.}$ R cledqRe1122 $(\bar{\ell}_{1}^{I}e_{1})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | cledqRe1112 | | |
| cledqRe1122 $(\bar{\ell}_1^I e_1)(\bar{d}_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ R | cledqRe1113 | | R |
| | cledqRe1121 | $(\bar{\ell}_1^I e_1)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1123 $(\bar{\ell}_1^I e_1)(\bar{d}_2 q_3^I)/\mathrm{TeV}^2 + \mathrm{h.c.}$ R | cledqRe1122 | | ${ m R}$ |
| | cledqRe1123 | $(\ell_1^I e_1)(d_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| WC name | Operator | Type |
|-------------|--|----------|
| cledqRe1131 | $(\bar{\ell}_1^I e_1)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1132 | $(\bar{\ell}_1^I e_1)(\bar{d}_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1133 | $(\bar{\ell}_1^I e_1)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1211 | $(\bar{\ell}_1^I e_2)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1212 | $(\bar{\ell}_1^I e_2)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1213 | $(\bar{\ell}_1^I e_2)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1221 | $(\bar{\ell}_1^I e_2)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1222 | $(\ell_1^I e_2)(d_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1223 | $(\bar{\ell}_1^I e_2)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1231 | $(\bar{\ell}_1^I e_2)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1232 | $(\bar{\ell}_1^I e_2)(\bar{d}_3 q_2^I)/{\rm TeV}^2 + {\rm h.c.}$ | R |
| cledqRe1233 | $(\bar{\ell}_1^I e_2)(\bar{d}_3 q_3^I)/{\rm TeV}^2 + {\rm h.c.}$ | R |
| cledqRe1311 | $(\bar{\ell}_1^I e_3)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1312 | $(\bar{\ell}_1^I e_3)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1313 | $(\bar{\ell}_1^I e_3)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1321 | $(\bar{\ell}_1^I e_3)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1322 | $(\bar{\ell}_1^I e_3)(\bar{d}_2 q_2^I)/{\rm TeV}^2 + {\rm h.c.}$ | R |
| cledqRe1323 | $(\bar{\ell}_1^I e_3)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1331 | $(\bar{\ell}_1^I e_3)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1332 | $(\ell_1^I e_3)(d_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe1333 | $(\bar{\ell}_1^I e_3)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2111 | $(\bar{\ell}_{2}^{I}e_{1})(\bar{d}_{1}q_{1}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| cledqRe2112 | $(\bar{\ell}_2^I e_1)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2113 | $(\bar{\ell}_2^I e_1)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2121 | $(\bar{\ell}_{2}^{I}e_{1})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| cledqRe2122 | $(\bar{\ell}_{2}^{I}e_{1})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| cledqRe2123 | $(\bar{\ell}_{2}^{I}e_{1})(\bar{d}_{2}q_{3}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| cledqRe2131 | $(\bar{\ell}_2^I e_1)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2132 | $(\bar{\ell}_2^I e_1)(\bar{d}_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2133 | $(\ell_2^I e_1)(d_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cledqRe2211 | $(\ell_2^I e_2)(d_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cledqRe2212 | $(\bar{\ell}_{2}^{I}e_{2})(\bar{d}_{1}q_{2}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| cledqRe2213 | $(\ell_2^I e_2)(d_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2221 | $(\ell_2^I e_2)(d_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2222 | $(\bar{\ell}_2^I e_2)(\bar{d}_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2223 | $(\bar{\ell}_2^I e_2)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2231 | $(\bar{\ell}_2^I e_2)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cledqRe2232 | $(\bar{\ell}_{2}^{I}e_{2})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ | R |
| cledqRe2233 | $(\overline{\ell_2^I}e_2)(\overline{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqRe2311 | $(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{1}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| cledqRe2312 | $(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ | R |
| cledqRe2313 | $(\bar{\ell}_2^I e_3)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |

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| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | |
| $\begin{array}{llll} \text{cledqRe2331} & (\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe2332} & (\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe2333} & (\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3111} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{1}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3112} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{1}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3113} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{1}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3121} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3122} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3123} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3131} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3132} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | |
| $\begin{array}{llll} \text{cledqRe2332} & (\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe2333} & (\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3111} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{1}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3112} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{1}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3113} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{1}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3121} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3122} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3123} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3131} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3132} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | |
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| $\begin{array}{llll} \text{cledqRe3111} & & & & & & & & & & & & \\ \text{cledqRe3112} & & & & & & & & & & \\ & & & & & & & & $ | |
| $\begin{array}{llll} \text{cledqRe3112} & & & & & & & & & & & & & & & & & & \\ \text{cledqRe3113} & & & & & & & & & & & & & & & & & \\ \text{cledqRe3121} & & & & & & & & & & & & & & & & \\ \text{cledqRe3121} & & & & & & & & & & & & & & & \\ \text{cledqRe3122} & & & & & & & & & & & & & & \\ \text{cledqRe3122} & & & & & & & & & & & & & & \\ \text{cledqRe3123} & & & & & & & & & & & & & \\ \text{cledqRe3123} & & & & & & & & & & & & & \\ \text{cledqRe3131} & & & & & & & & & & & & & \\ \text{cledqRe3131} & & & & & & & & & & & & \\ \text{cledqRe3132} & & & & & & & & & & & & \\ \text{cledqRe3132} & & & & & & & & & & & & \\ \text{cledqRe3133} & & & & & & & & & & & & \\ \text{cledqRe3133} & & & & & & & & & & & \\ \text{cledqRe3133} & & & & & & & & & & & \\ \text{cledqRe3133} & & & & & & & & & & \\ \text{cledqRe3133} & & & & & & & & & & \\ \end{array}$ | |
| $\begin{array}{lll} \text{cledqRe3121} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3122} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3123} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3131} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3132} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | |
| $ \begin{array}{lll} {\rm cledqRe3122} & & & & & & & & & & & & & & & & & & $ | |
| $ \begin{array}{lll} \text{cledqRe3123} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{2}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3131} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3132} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqRe3133} & (\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array} $ | |
| cledqRe3131 $(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.}$ R cledqRe3132 $(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R cledqRe3133 $(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3131 $(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.}$ R cledqRe3132 $(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R cledqRe3133 $(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3132 $(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R cledqRe3133 $(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3133 $(\bar{\ell}_3^I e_1)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| \overline{I} | |
| cledqRe3211 $(\bar{\ell}_3^I e_2)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3212 $(\bar{\ell}_3^I e_2)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3213 $(\ell_3^I e_2)(d_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3221 $(\bar{\ell}_{3}^{I}e_{2})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3222 $(\bar{\ell}_{3}^{I}e_{2})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3223 $(\ell_3^I e_2)(d_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3231 $(\bar{\ell}_3^I e_2)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3232 $(\bar{\ell}_{3}^{I}e_{2})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3233 $(\bar{\ell}_{3}^{I}e_{2})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3311 $(\bar{\ell}_3^I e_3)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3312 $(\bar{\ell}_{3}^{I}e_{3})(\bar{d}_{1}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3313 $(\bar{\ell}_3^I e_3)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3321 $(\bar{\ell}_{3}^{I}e_{3})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3322 $(\bar{\ell}_{3}^{I}e_{3})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3323 $(\ell_3^I e_3)(d_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3331 $(\ell_3^I e_3)(d_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqRe3332 $(\bar{\ell}_{3}^{I}e_{3})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqRe3333 $(\bar{\ell}_{3}^{I}e_{3})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | |
| cledqIm1111 $i(\bar{\ell}_1^I e_1)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqIm1112 $i(\bar{\ell}_1^I e_1)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqIm1113 $i(\bar{\ell}_1^I e_1)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqIm1121 $i(\bar{\ell}_1^I e_1)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqIm1122 $i(\bar{\ell}_1^I e_1)(\bar{d}_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqIm1123 $i(\bar{\ell}_1^I e_1)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqIm1131 $i(\bar{\ell}_1^I e_1)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqIm1132 $i(\bar{\ell}_1^I e_1)(\bar{d}_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ R | |
| cledqIm1133 $i(\bar{\ell}_1^I e_1)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ R | |

| cledqIm1211 $i(\overline{\ell_1^1}e_2)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm1212 $i(\overline{\ell_1^1}e_2)(\overline{\ell_1^1}q_2^1)$ TeV² + h.c. R cledqIm1213 $i(\overline{\ell_1^1}e_2)(\overline{\ell_1^1}q_2^1)$ TeV² + h.c. R cledqIm1221 $i(\overline{\ell_1^1}e_2)(\overline{\ell_2^1}q_2^1)$ TeV² + h.c. R cledqIm1222 $i(\overline{\ell_1^1}e_2)(\overline{\ell_2^1}q_2^1)$ TeV² + h.c. R cledqIm1223 $i(\overline{\ell_1^1}e_2)(\overline{\ell_2^1}q_2^1)$ TeV² + h.c. R cledqIm1231 $i(\overline{\ell_1^1}e_2)(\overline{\ell_2^1}q_2^1)$ TeV² + h.c. R cledqIm1232 $i(\overline{\ell_1^1}e_2)(\overline{\ell_2^1}q_2^1)$ TeV² + h.c. R cledqIm1233 $i(\overline{\ell_1^1}e_2)(\overline{\ell_2^1}q_2^1)$ TeV² + h.c. R cledqIm1231 $i(\overline{\ell_1^1}e_2)(\overline{\ell_2^1}q_2^1)$ TeV² + h.c. R cledqIm1231 $i(\overline{\ell_1^1}e_2)(\overline{\ell_2^1}q_2^1)$ TeV² + h.c. R cledqIm1311 $i(\overline{\ell_1^1}e_3)(\overline{\ell_1^1}q_2^1)$ TeV² + h.c. R cledqIm1312 $i(\overline{\ell_1^1}e_3)(\overline{\ell_1^1}q_2^1)$ TeV² + h.c. R cledqIm1313 $i(\overline{\ell_1^1}e_3)(\overline{\ell_1^1}q_2^1)$ TeV² + h.c. R cledqIm1321 $i(\overline{\ell_1^1}e_3)(\overline{\ell_2^1}q_1^1)$ TeV² + h.c. R cledqIm1322 $i(\overline{\ell_1^1}e_3)(\overline{\ell_2^1}q_1^1)$ TeV² + h.c. R cledqIm1322 $i(\overline{\ell_1^1}e_3)(\overline{\ell_2^1}q_1^1)$ TeV² + h.c. R cledqIm1323 $i(\overline{\ell_1^1}e_3)(\overline{\ell_2^1}q_1^1)$ TeV² + h.c. R cledqIm1332 $i(\overline{\ell_1^1}e_3)(\overline{\ell_2^1}q_1^1)$ TeV² + h.c. R cledqIm1333 $i(\overline{\ell_1^1}e_3)(\overline{\ell_2^1}q_1^1)$ TeV² + h.c. R cledqIm1333 $i(\overline{\ell_1^1}e_3)(\overline{\ell_2^1}q_1^1)$ TeV² + h.c. R cledqIm1333 $i(\overline{\ell_1^1}e_3)(\overline{\ell_2^1}q_1^1)$ TeV² + h.c. R cledqIm2111 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2111 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2111 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2112 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2121 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2121 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^2}q_1^1)$ TeV² + h.c. R cledqIm2121 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^2}q_1^1)$ TeV² + h.c. R cledqIm2131 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^2}q_1^1)$ TeV² + h.c. R cledqIm2131 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^2}q_1^1)$ TeV² + h.c. R cledqIm2131 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2211 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2221 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2221 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + h.c. R cledqIm2222 $i(\overline{\ell_2^1}e_1)(\overline{\ell_1^1}q_1^1)$ TeV² + | WC name | Operator | Type |
|--|-------------|---|--------------|
| cledqIm1212 $i(\vec{\ell_1}^1e_2)(\vec{d_1}q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1213 $i(\vec{\ell_1}^1e_2)(\vec{d_1}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1221 $i(\vec{\ell_1}^1e_2)(\vec{d_2}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1222 $i(\vec{\ell_1}^1e_2)(\vec{d_2}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1223 $i(\vec{\ell_1}^1e_2)(\vec{d_2}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1231 $i(\vec{\ell_1}^1e_2)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1232 $i(\vec{\ell_1}^1e_2)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1233 $i(\vec{\ell_1}^1e_2)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1311 $i(\vec{\ell_1}^1e_3)(\vec{d_1}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1312 $i(\vec{\ell_1}^1e_3)(\vec{d_1}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1313 $i(\vec{\ell_1}^1e_3)(\vec{d_1}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1313 $i(\vec{\ell_1}^1e_3)(\vec{d_1}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1321 $i(\vec{\ell_1}^1e_3)(\vec{d_2}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1322 $i(\vec{\ell_1}^1e_3)(\vec{d_2}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1323 $i(\vec{\ell_1}^1e_3)(\vec{d_2}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1333 $i(\vec{\ell_1}^1e_3)(\vec{d_2}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1333 $i(\vec{\ell_1}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1333 $i(\vec{\ell_1}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1333 $i(\vec{\ell_1}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2111 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2112 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2113 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2112 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2113 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2121 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2121 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2123 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2131 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2131 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2131 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2212 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2221 $i(\vec{\ell_2}^1e_3)(\vec{d_3}q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2223 $i(\vec{\ell_2}^1e_3)(\vec$ | cledqIm1211 | $i(\bar{\ell}_1^I e_2) \overline{(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1212 | $i(\bar{\ell}_1^I e_2)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm1222 $i(\vec{\ell_1}e_2)(\bar{d}_2q_2^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1223 $i(\vec{\ell_1}e_2)(\bar{d}_2q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1231 $i(\vec{\ell_1}e_2)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1232 $i(\vec{\ell_1}e_2)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1233 $i(\vec{\ell_1}e_2)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1311 $i(\vec{\ell_1}e_3)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1312 $i(\vec{\ell_1}e_3)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1313 $i(\vec{\ell_1}e_3)(\bar{d}_1q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1313 $i(\vec{\ell_1}e_3)(\bar{d}_2q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1321 $i(\vec{\ell_1}e_3)(\bar{d}_2q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1322 $i(\vec{\ell_1}e_3)(\bar{d}_2q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1323 $i(\vec{\ell_1}e_3)(\bar{d}_2q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1332 $i(\vec{\ell_1}e_3)(\bar{d}_2q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1333 $i(\vec{\ell_1}e_3)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1333 $i(\vec{\ell_1}e_3)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm233 $i(\vec{\ell_1}e_3)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2111 $i(\vec{\ell_2}e_1)(\bar{d}_1q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2112 $i(\vec{\ell_2}e_1)(\bar{d}_1q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2112 $i(\vec{\ell_2}e_1)(\bar{d}_1q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2113 $i(\vec{\ell_2}e_1)(\bar{d}_1q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2121 $i(\vec{\ell_2}e_1)(\bar{d}_1q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2121 $i(\vec{\ell_2}e_1)(\bar{d}_1q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2121 $i(\vec{\ell_2}e_1)(\bar{d}_2q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2121 $i(\vec{\ell_2}e_1)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm213 $i(\vec{\ell_2}e_1)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2211 $i(\vec{\ell_2}e_2)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2212 $i(\vec{\ell_2}e_2)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2211 $i(\vec{\ell_2}e_2)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2221 $i(\vec{\ell_2}e_2)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2221 $i(\vec{\ell_2}e_2)(\bar{d}_3q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2231 $i(\vec{\ell_2}e_2)(\bar{d}_3q_3^I$ | cledqIm1213 | | R |
| cledqIm1233 $i(\vec{\ell_1}^1e_2)(\bar{d}_2q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1231 $i(\vec{\ell_1}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1232 $i(\vec{\ell_1}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1233 $i(\vec{\ell_1}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1311 $i(\vec{\ell_1}^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1312 $i(\vec{\ell_1}^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1313 $i(\vec{\ell_1}^1e_3)(\bar{d}_1q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1321 $i(\vec{\ell_1}^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1322 $i(\vec{\ell_1}^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1322 $i(\vec{\ell_1}^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1323 $i(\vec{\ell_1}^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1333 $i(\vec{\ell_1}^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2111 $i(\vec{\ell_2}^1e_1)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2112 $i(\vec{\ell_2}^1e_1)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2112 $i(\vec{\ell_2}^1e_1)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2113 $i(\vec{\ell_2}^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2123 $i(\vec{\ell_2}^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2123 $i(\vec{\ell_2}^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2131 $i(\vec{\ell_2}^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2212 $i(\vec{\ell_2}^1e_1)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2213 $i(\vec{\ell_2}^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2213 $i(\vec{\ell_2}^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2213 $i(\vec{\ell_2}^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2221 $i(\vec{\ell_2}^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2221 $i(\vec{\ell_2}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2231 $i(\vec{\ell_2}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2311 $i(\vec{\ell_2}^1e_2)(\bar$ | cledqIm1221 | $i(\bar{\ell}_1^I e_2)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm1233 $i(\vec{\ell_1}^1e_2)(\bar{d}_2q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1231 $i(\vec{\ell_1}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1232 $i(\vec{\ell_1}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1233 $i(\vec{\ell_1}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1311 $i(\vec{\ell_1}^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1312 $i(\vec{\ell_1}^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1313 $i(\vec{\ell_1}^1e_3)(\bar{d}_1q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1321 $i(\vec{\ell_1}^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1322 $i(\vec{\ell_1}^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1322 $i(\vec{\ell_1}^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1323 $i(\vec{\ell_1}^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm1333 $i(\vec{\ell_1}^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2111 $i(\vec{\ell_2}^1e_1)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2112 $i(\vec{\ell_2}^1e_1)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2112 $i(\vec{\ell_2}^1e_1)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2113 $i(\vec{\ell_2}^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2123 $i(\vec{\ell_2}^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2123 $i(\vec{\ell_2}^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2131 $i(\vec{\ell_2}^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2212 $i(\vec{\ell_2}^1e_1)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2213 $i(\vec{\ell_2}^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2213 $i(\vec{\ell_2}^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2213 $i(\vec{\ell_2}^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2221 $i(\vec{\ell_2}^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2221 $i(\vec{\ell_2}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2231 $i(\vec{\ell_2}^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2311 $i(\vec{\ell_2}^1e_2)(\bar$ | cledqIm1222 | $i(\bar{\ell}_1^I e_2)(\bar{d}_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1223 | $i(\bar{\ell}_1^I e_2)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1231 | $i(\bar{\ell}_1^I e_2)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1232 | $i(\ell_1^I e_2)(d_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1233 | $i(\bar{\ell}_1^I e_2)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1311 | $i(\bar{\ell}_1^I e_3)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1312 | $i(\bar{\ell}_1^I e_3)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm1313 | $i(\bar{\ell}_1^I e_3)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm1321 | $i(\bar{\ell}_1^I e_3)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1322 | $i(\bar{\ell}_1^I e_3)(\bar{d}_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1323 | $i(\bar{\ell}_1^I e_3)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1331 | $i(\bar{\ell}_1^I e_3)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1332 | $i(\bar{\ell}_1^I e_3)(\bar{d}_3 q_2^I)/{\rm TeV}^2 + {\rm h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm1333 | $i(\ell_1^I e_3)(d_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm2111 | $i(\bar{\ell}_{2}^{I}e_{1})(\bar{d}_{1}q_{1}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm2112 | $i(\ell_2^I e_1)(d_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2113 | $i(\ell_2^I e_1)(d_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2121 | $i(\bar{\ell}_2^I e_1)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2122 | $i(\bar{\ell}_2^I e_1)(\bar{d}_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2123 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2131 | $i(\bar{\ell}_{2}^{I}e_{1})(\bar{d}_{3}q_{1}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2132 | $i(\bar{\ell}_2^I e_1)(\bar{d}_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2133 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2211 | $i(\bar{\ell}_2^I e_2)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2212 | $i(\bar{\ell}_2^I e_2)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2213 | $i(\bar{\ell}_2^I e_2)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2221 | $i(\bar{\ell}_2^I e_2)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2222 | $i(\bar{\ell}_2^I e_2)(\bar{d}_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm2223 | $i(\bar{\ell}_2^I e_2)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{cledqIm2233} & i(\bar{\ell}_{2}^{I}e_{2})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2311} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2312} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2313} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2321} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2322} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cledqIm2231 | $i(\ell_2^I e_2)(d_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{cledqIm2233} & i(\bar{\ell}_{2}^{I}e_{2})(\bar{d}_{3}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2311} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2312} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2313} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2321} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cledqIm2322} & i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cledqIm2232 | $i(\bar{\ell}_{2}^{I}e_{2})(\bar{d}_{3}q_{2}^{I})/\text{TeV}^{2}+\text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lll} {\rm cledqIm2312} & i(\bar{\ell}_{2}^{\bar{I}}e_{3})(\bar{d}_{1}q_{2}^{\bar{I}})/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cledqIm2313} & i(\bar{\ell}_{2}^{\bar{I}}e_{3})(\bar{d}_{1}q_{3}^{\bar{I}})/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cledqIm2321} & i(\bar{\ell}_{2}^{\bar{I}}e_{3})(\bar{d}_{2}q_{1}^{\bar{I}})/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cledqIm2322} & i(\bar{\ell}_{2}^{\bar{I}}e_{3})(\bar{d}_{2}q_{2}^{\bar{I}})/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cledqIm2233 | $i(\bar{\ell}_2^I e_2)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lll} {\rm cledqIm2313} & & & & & i(\bar{\ell}_{2}^{\bar{I}}e_{3})(\bar{d}_{1}q_{3}^{\bar{I}})/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cledqIm2321} & & & & & i(\bar{\ell}_{2}^{\bar{I}}e_{3})(\bar{d}_{2}q_{1}^{\bar{I}})/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cledqIm2322} & & & & i(\bar{\ell}_{2}^{\bar{I}}e_{3})(\bar{d}_{2}q_{2}^{\bar{I}})/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cledqIm2311 | $i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{1}q_{1}^{I})/\text{TeV}^{2}+\text{h.c.}$ | ${ m R}$ |
| cledqIm2321 $i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.}$ R cledqIm2322 $i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | cledqIm2312 | | ${ m R}$ |
| cledqIm2321 $i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{1}^{I})/\text{TeV}^{2} + \text{h.c.}$ R cledqIm2322 $i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ R | cledqIm2313 | $i(\bar{\ell}_2^I e_3)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm2322 $i(\bar{\ell}_2^I e_3)(\bar{d}_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ R | cledqIm2321 | $i(\bar{\ell}_2^I e_3)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm2323 $i(ar{\ell}_2^Ie_3)(ar{d}_2q_3^I)/{ m TeV}^2+{ m h.c.}$ R | cledqIm2322 | $i(\bar{\ell}_{2}^{I}e_{3})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| | cledqIm2323 | $i(\bar{\ell}_2^I e_3)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |

| cledqIm2331 $i(\vec{\ell}_2^1e_3)(\vec{d}_3q_1^1)$ TeV² + h.c. R cledqIm2332 $i(\vec{\ell}_2^1e_3)(\vec{d}_3q_2^1)$ TeV² + h.c. R cledqIm3313 $i(\vec{\ell}_2^1e_3)(\vec{d}_3q_2^1)$ TeV² + h.c. R cledqIm3111 $i(\vec{\ell}_3^1e_1)(\vec{d}_1q_2^1)$ TeV² + h.c. R cledqIm3112 $i(\vec{\ell}_3^1e_1)(\vec{d}_1q_2^1)$ TeV² + h.c. R cledqIm3113 $i(\vec{\ell}_3^1e_1)(\vec{d}_1q_2^1)$ TeV² + h.c. R cledqIm3123 $i(\vec{\ell}_3^1e_1)(\vec{d}_2q_1^1)$ TeV² + h.c. R cledqIm3121 $i(\vec{\ell}_3^1e_1)(\vec{d}_2q_1^1)$ TeV² + h.c. R cledqIm3122 $i(\vec{\ell}_3^1e_1)(\vec{d}_2q_2^1)$ TeV² + h.c. R cledqIm3123 $i(\vec{\ell}_3^1e_1)(\vec{d}_2q_2^1)$ TeV² + h.c. R cledqIm3131 $i(\vec{\ell}_3^1e_1)(\vec{d}_3q_1^1)$ TeV² + h.c. R cledqIm3132 $i(\vec{\ell}_3^1e_1)(\vec{d}_3q_2^1)$ TeV² + h.c. R cledqIm3133 $i(\vec{\ell}_3^1e_1)(\vec{d}_3q_3^1)$ TeV² + h.c. R cledqIm3131 $i(\vec{\ell}_3^1e_1)(\vec{d}_3q_3^1)$ TeV² + h.c. R cledqIm3121 $i(\vec{\ell}_3^1e_2)(\vec{d}_1q_1^1)$ TeV² + h.c. R cledqIm3211 $i(\vec{\ell}_3^1e_2)(\vec{d}_1q_1^1)$ TeV² + h.c. R cledqIm3212 $i(\vec{\ell}_3^1e_2)(\vec{d}_1q_1^1)$ TeV² + h.c. R cledqIm3212 $i(\vec{\ell}_3^1e_2)(\vec{d}_1q_1^1)$ TeV² + h.c. R cledqIm3223 $i(\vec{\ell}_3^1e_2)(\vec{d}_1q_1^1)$ TeV² + h.c. R cledqIm3223 $i(\vec{\ell}_3^1e_2)(\vec{d}_2q_1^1)$ TeV² + h.c. R cledqIm3223 $i(\vec{\ell}_3^1e_2)(\vec{d}_2q_1^1)$ TeV² + h.c. R cledqIm3223 $i(\vec{\ell}_3^1e_2)(\vec{d}_2q_1^1)$ TeV² + h.c. R cledqIm3233 $i(\vec{\ell}_3^1e_2)(\vec{d}_2q_1^1)$ TeV² + h.c. R cledqIm3231 $i(\vec{\ell}_3^1e_2)(\vec{d}_3q_1^1)$ TeV² + h.c. R cledqIm3231 $i(\vec{\ell}_3^1e_2)(\vec{d}_3q_1^1)$ TeV² + h.c. R cledqIm3321 $i(\vec{\ell}_3^1e_2)(\vec{d}_3q_1^1)$ TeV² + h.c. R cledqIm3321 $i(\vec{\ell}_3^1e_2)(\vec{d}_3q_1^1)$ TeV² + h.c. R cledqIm3321 $i(\vec{\ell}_3^1e_3)(\vec{d}_1q_2^1)$ TeV² + h.c. R cledqIm3322 $i(\vec{\ell}_3^1e_3)(\vec{d}_1q_2^1)$ TeV² + h.c. R cledqIm3332 $i(\vec{\ell}_3^1e_3)(\vec{d}_1^1e_3)$ TeV² + h.c. R cledqIm3332 $i(\vec{\ell}_3^1e_3)(\vec{d}_3^1e_3)$ TeV² + h.c. R cledqIm3333 $i(\vec{\ell}_3^1e_3)(\vec$ | WC name | Operator | Type |
|--|--------------|--|--------------|
| cledqIm2332 $i(\frac{1}{6}e_3)(\frac{1}{6}a_9^f_2)/\text{TeV}^2 + \text{h.c.}$ R cledqIm2333 $i(\frac{1}{6}e_3)(\frac{1}{6}a_9^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3111 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1)^f_4/\text{TeV}^2 + \text{h.c.}$ R cledqIm3112 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3113 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3121 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3121 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3122 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3123 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3131 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3132 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3133 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3133 $i(\frac{1}{6}e_1)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\frac{1}{6}e_2)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3212 $i(\frac{1}{6}e_2)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3213 $i(\frac{1}{6}e_2)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3221 $i(\frac{1}{6}e_2)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\frac{1}{6}e_2)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\frac{1}{6}e_2)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\frac{1}{6}e_2)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3231 $i(\frac{1}{6}e_2)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3231 $i(\frac{1}{6}e_3)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3313 $i(\frac{1}{6}e_3)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3313 $i(\frac{1}{6}e_3)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\frac{1}{6}e_3)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\frac{1}{6}e_3)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\frac{1}{6}e_3)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3322 $i(\frac{1}{6}e_3)(\frac{1}{6}a_1^f_3)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3323 $i(\frac{1}{6}e_3)(1$ | cledqIm2331 | $i(\bar{\ell}_2^I e_3)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm3111 $i(\bar{\ell}_3^1e_1)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3112 $i(\bar{\ell}_3^1e_1)(\bar{d}_1q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3113 $i(\bar{\ell}_3^1e_1)(\bar{d}_1q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3121 $i(\bar{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3122 $i(\bar{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3123 $i(\bar{\ell}_3^1e_1)(\bar{d}_2q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3131 $i(\bar{\ell}_3^1e_1)(\bar{d}_2q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3131 $i(\bar{\ell}_3^1e_1)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3132 $i(\bar{\ell}_3^1e_1)(\bar{d}_3q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3133 $i(\bar{\ell}_3^1e_1)(\bar{d}_3q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3212 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3213 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3221 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3222 $i(\bar{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\bar{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3311 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3322 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3322 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3322 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3323 $i(\bar{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\bar{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\bar{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\bar{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cquqd1Re1111 $i(\bar{q}_1^1e_1)($ | cledqIm2332 | $i(\bar{\ell}_2^I e_3)(\bar{d}_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm3111 $i(\bar{\ell}_3^1e_1)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3112 $i(\bar{\ell}_3^1e_1)(\bar{d}_1q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3113 $i(\bar{\ell}_3^1e_1)(\bar{d}_1q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3121 $i(\bar{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3122 $i(\bar{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3123 $i(\bar{\ell}_3^1e_1)(\bar{d}_2q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3131 $i(\bar{\ell}_3^1e_1)(\bar{d}_2q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3131 $i(\bar{\ell}_3^1e_1)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3132 $i(\bar{\ell}_3^1e_1)(\bar{d}_3q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3133 $i(\bar{\ell}_3^1e_1)(\bar{d}_3q_2^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3212 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3213 $i(\bar{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3221 $i(\bar{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3222 $i(\bar{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\bar{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3231 $i(\bar{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3311 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3313 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3322 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3322 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3323 $i(\bar{\ell}_3^1e_3)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3323 $i(\bar{\ell}_3^1e_3)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\bar{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\bar{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\bar{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cquqd1Re1111 $i(\bar{q}_1^1e_1)($ | cledqIm2333 | $i(\bar{\ell}_2^I e_3)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm3113 $i(\tilde{\ell}_3^1e_1)(\bar{d}_1q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3121 $i(\tilde{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3122 $i(\tilde{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3123 $i(\tilde{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3131 $i(\tilde{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3132 $i(\tilde{\ell}_3^1e_1)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3133 $i(\tilde{\ell}_3^1e_1)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\tilde{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\tilde{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3212 $i(\tilde{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3213 $i(\tilde{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3213 $i(\tilde{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3221 $i(\tilde{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3222 $i(\tilde{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\tilde{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\tilde{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3231 $i(\tilde{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3311 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3311 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3322 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3323 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3333 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cquqd1Re1111 $i(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1$ | cledqIm3111 | $i(\bar{\ell}_3^I e_1)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm3113 $i(\tilde{\ell}_3^1e_1)(\bar{d}_1q_3^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3121 $i(\tilde{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3122 $i(\tilde{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3123 $i(\tilde{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3131 $i(\tilde{\ell}_3^1e_1)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3132 $i(\tilde{\ell}_3^1e_1)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3133 $i(\tilde{\ell}_3^1e_1)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\tilde{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\tilde{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3212 $i(\tilde{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3213 $i(\tilde{\ell}_3^1e_2)(\bar{d}_1q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3213 $i(\tilde{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3221 $i(\tilde{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3222 $i(\tilde{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\tilde{\ell}_3^1e_2)(\bar{d}_2q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\tilde{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3231 $i(\tilde{\ell}_3^1e_2)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3311 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3311 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3322 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3323 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3333 $i(\tilde{\ell}_3^1e_3)(\bar{d}_3q_1^1)/\text{TeV}^2 + \text{h.c.}$ R cquqd1Re1111 $i(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1)(\tilde{q}_1^1e_1$ | cledqIm3112 | $i(\bar{\ell}_3^I e_1)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3113 | $i(\bar{\ell}_{3}^{I}e_{1})(\bar{d}_{1}q_{3}^{I})/\text{TeV}^{2} + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3121 | $i(\bar{\ell}_3^I e_1)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3122 | $i(\ell_3^I e_1)(d_2 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| cledqIm3131 $i(\vec{\ell_3}e_1)(\bar{d_3}q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3132 $i(\vec{\ell_3}e_1)(\bar{d_3}q_2^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3133 $i(\vec{\ell_3}e_1)(\bar{d_3}q_2^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3211 $i(\vec{\ell_3}e_2)(\bar{d_1}q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3212 $i(\vec{\ell_3}e_2)(\bar{d_1}q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3213 $i(\vec{\ell_3}e_2)(\bar{d_1}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3221 $i(\vec{\ell_3}e_2)(\bar{d_2}q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3222 $i(\vec{\ell_3}e_2)(\bar{d_2}q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3223 $i(\vec{\ell_3}e_2)(\bar{d_2}q_2^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\vec{\ell_3}e_2)(\bar{d_2}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3231 $i(\vec{\ell_3}e_2)(\bar{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3232 $i(\vec{\ell_3}e_2)(\bar{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\vec{\ell_3}e_2)(\bar{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3233 $i(\vec{\ell_3}e_2)(\bar{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3311 $i(\vec{\ell_3}e_3)(\bar{d_1}q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3312 $i(\vec{\ell_3}e_3)(\bar{d_1}q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3313 $i(\vec{\ell_3}e_3)(\bar{d_1}q_2^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3313 $i(\vec{\ell_3}e_3)(\bar{d_1}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\vec{\ell_3}e_3)(\bar{d_1}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\vec{\ell_3}e_3)(\bar{d_1}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3321 $i(\vec{\ell_3}e_3)(\bar{d_2}q_1^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3323 $i(\vec{\ell_3}e_3)(\bar{d_2}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3331 $i(\vec{\ell_3}e_3)(\bar{d_2}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3331 $i(\vec{\ell_3}e_3)(\bar{d_2}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\vec{\ell_3}e_3)(\bar{d_2}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3331 $i(\vec{\ell_3}e_3)(\bar{d_2}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3331 $i(\vec{\ell_3}e_3)(\bar{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\vec{\ell_3}e_3)(\bar{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3333 $i(\vec{\ell_3}e_3)(\bar{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\vec{\ell_3}e_3)(\bar{d_3}q_3^I)/\text{TeV}^2 + \text{h.c.}$ R cledqIm3332 $i(\vec{\ell_3}e_3)(\bar{d_3}e_3)(\bar{d_3}e_3)/\text{TeV}^2 + \text{h.c.}$ R cquqdIRe1111 $i(\vec{q_1}e_3)(\bar{e_1}e_3)/\text{TeV}^2 + \text{h.c.}$ R cquqdIRe1112 $i(\vec{q_1}e_3)/\text{TeV}^2 + \text{h.c.}$ R cquqdIRe1131 $i(\vec{q_1}e_3)/\text{TeV}^2 $ | cledqIm3123 | $i(\bar{\ell}_3^I e_1)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3131 | $i(\bar{\ell}_3^I e_1)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3132 | $i(\bar{\ell}_3^I e_1)(\bar{d}_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3133 | $i(\bar{\ell}_3^I e_1)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3211 | $i(\bar{\ell}_3^I e_2)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3212 | $i(\bar{\ell}_3^I e_2)(\bar{d}_1 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3213 | $i(\bar{\ell}_3^I e_2)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3221 | $i(\bar{\ell}_3^I e_2)(\bar{d}_2 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3222 | $i(\bar{\ell}_{3}^{I}e_{2})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2}+\text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3223 | $i(\ell_3^I e_2)(d_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3231 | $i(\bar{\ell}_3^I e_2)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3232 | $i(\ell_3^I e_2)(d_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cledqIm3233 | $i(\ell_3^I e_2)(d_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3311 | $i(\bar{\ell}_3^I e_3)(\bar{d}_1 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3312 | $i(\bar{\ell}_{3}^{I}e_{3})(\bar{d}_{1}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3313 | $i(\bar{\ell}_3^I e_3)(\bar{d}_1 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3321 | $i(\bar{\ell}_3^{I}e_3)(\bar{d}_2q_1^{I})/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3322 | $i(\bar{\ell}_{3}^{I}e_{3})(\bar{d}_{2}q_{2}^{I})/\text{TeV}^{2} + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3323 | $i(\bar{\ell}_3^I e_3)(\bar{d}_2 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3331 | $i(\bar{\ell}_3^I e_3)(\bar{d}_3 q_1^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cledqIm3332 | $i(\bar{\ell}_3^I e_3)(\bar{d}_3 q_2^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lllll} & \text{cquqd1Re1111} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1112} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1113} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{1}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1121} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1122} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1123} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1131} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1132} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1133} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1211} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{I}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{I}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})($ | cledqIm3333 | $i(\bar{\ell}_3^I e_3)(\bar{d}_3 q_3^I)/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} & \text{cquqd1Re1112} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1113} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{1}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1121} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1122} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1123} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1131} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1132} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1133} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1211} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cquqd1Re1111 | $(\bar{q}_1^I u_1)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{cquqd1Re1113} & & & & & & & & & & & & & & & & & & &$ | cquqd1Re1112 | $(\bar{q}_1^I u_1)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} & \text{cquqd1Re1121} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1122} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1123} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1131} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1132} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1133} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1211} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cquqd1Re1113 | $(\bar{q}_1^I u_1)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cquqd1Re1123} & & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1131} & & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1132} & & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1133} & & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1211} & & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1212} & & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \\ {\rm cquqd1Re1212} & & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cquqd1Re1121 | $(\bar{q}_1^I u_1)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cquqd1Re1123} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1131} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1132} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1133} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1211} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | | $(\bar{q}_1^I u_1)(\bar{q}_2^J d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{lll} {\rm cquqd1Re1132} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{\bar{J}}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1133} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{\bar{J}}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1211} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{\bar{J}}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{\bar{J}}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cquqd1Re1123 | $(\bar{q}_1^I u_1)(\bar{q}_2^J d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} {\rm cquqd1Re1132} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{\bar{J}}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1133} & (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{\bar{J}}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1211} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{\bar{J}}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1212} & (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{\bar{J}}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cquqd1Re1131 | $(\bar{q}_1^I u_1)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Re1211 $(\bar{q}_1^I u_2)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R cquqd1Re1212 $(\bar{q}_1^I u_2)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Re1132 | $(\bar{q}_1^I u_1)(\bar{q}_3^{\bar{J}} d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Re1211 $(\bar{q}_1^I u_2)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R cquqd1Re1212 $(\bar{q}_1^I u_2)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Re1133 | $(\bar{q}_1^I u_1)(\bar{q}_3^{\bar{J}} d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Re1212 $(\bar{q}_1^I u_2)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Re1211 | $(\bar{q}_1^I u_2)(\bar{q}_1^J d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Re1213 $(\bar{q}_1^I u_2)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Re1212 | $(\bar{q}_1^I u_2)(\bar{q}_1^J d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| | cquqd1Re1213 | $(\bar{q}_1^I u_2)(\bar{q}_1^J d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|--|--------------|--|--------------|
| $\begin{array}{llll} {\rm cquqd1Re1223} & (\overline{q_1^1}u_2)(\overline{q_2^2}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1231} & (\overline{q_1^1}u_2)(\overline{q_3^2}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1232} & (\overline{q_1^1}u_2)(\overline{q_3^2}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1233} & (\overline{q_1^1}u_3)(\overline{q_1^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1311} & (\overline{q_1^1}u_3)(\overline{q_1^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1312} & (\overline{q_1^1}u_3)(\overline{q_1^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1312} & (\overline{q_1^1}u_3)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1321} & (\overline{q_1^1}u_3)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1322} & (\overline{q_1^1}u_3)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1322} & (\overline{q_1^1}u_3)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1323} & (\overline{q_1^1}u_3)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1323} & (\overline{q_1^1}u_3)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1332} & (\overline{q_1^1}u_3)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re1333} & (\overline{q_1^1}u_3)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2111} & (\overline{q_2^1}u_1)(\overline{q_1^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2112} & (\overline{q_2^1}u_1)(\overline{q_1^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2112} & (\overline{q_2^1}u_1)(\overline{q_1^2}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2122} & (\overline{q_2^1}u_1)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2123} & (\overline{q_2^1}u_1)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2123} & (\overline{q_2^1}u_1)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2123} & (\overline{q_2^1}u_1)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2123} & (\overline{q_2^1}u_1)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2212} & (\overline{q_2^1}u_1)(\overline{q_2^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2212} & (\overline{q_2^1}u_2)(\overline{q_1^1}d_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2221} & (\overline{q_2^1}u_2)(\overline{q_2^1}d_3$ | cquqd1Re1221 | $(\bar{q}_1^I u_2)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1222 | $(\bar{q}_1^I u_2)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1223 | $(\bar{q}_1^I u_2)(\bar{q}_2^J d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1231 | $(\bar{q}_1^I u_2)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1232 | $(\bar{q}_1^I u_2)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | | $(\bar{q}_1^I u_2)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1311 | $(\bar{q}_1^I u_3)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | | $(\bar{q}_1^I u_3)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1313 | $(\bar{q}_1^I u_3)(\bar{q}_1^J d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1321 | $(\bar{q}_1^I u_3)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Re1322 | $(\bar{q}_1^I u_3)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1323 | $(\bar{q}_1^I u_3)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1331 | $(\bar{q}_1^I u_3)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1332 | $(\bar{q}_1^I u_3)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re1333 | $(\bar{q}_1^I u_3)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re2111 | $(\bar{q}_2^I u_1)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re2112 | $(\bar{q}_2^I u_1)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | | $(\bar{q}_2^I u_1)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re2121 | $(\bar{q}_2^I u_1)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | | $(\bar{q}_2^I u_1)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re2123 | $(\bar{q}_2^I u_1)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re2131 | $(\bar{q}_2^I u_1)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lllll} & \text{cquqd1Re2211} & (\bar{q}_2^Iu_2)(\bar{q}_1^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2212} & (\bar{q}_2^Iu_2)(\bar{q}_1^Jd_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2213} & (\bar{q}_2^Iu_2)(\bar{q}_1^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2221} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2222} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2223} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2231} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2232} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2233} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2311} & (\bar{q}_2^Iu_3)(\bar{q}_1^Id_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2312} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2313} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2321} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2322} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2322} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2323} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2323} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2323} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2331} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & cquqd1$ | cquqd1Re2132 | $(\bar{q}_2^I u_1)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lllll} {\rm cquqd1Re2212} & & & & & & & & & & & & & & & & & & &$ | cquqd1Re2133 | | \mathbf{R} |
| $\begin{array}{lllll} & \text{cquqd1Re2213} & (\bar{q}_2^Iu_2)(\bar{q}_1^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2221} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2222} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2223} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2231} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2232} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2233} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2311} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2312} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2313} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2321} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2322} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2323} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2323} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2331} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2331} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ & cquqd1$ | | $(\bar{q}_2^I u_2)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llll} {\rm cquqd1Re2221} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2222} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2223} & (\bar{q}_2^Iu_2)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2231} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2232} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2233} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2311} & (\bar{q}_2^Iu_2)(\bar{q}_3^Id_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2312} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2313} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2321} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2322} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2323} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2323} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2331} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2331} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2331} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_3$ | cquqd1Re2212 | $(\bar{q}_2^I u_2)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cquqd1Re2222} & & & & & & & & & & & & & & & & & $ | cquqd1Re2213 | $(\bar{q}_2^I u_2)(\bar{q}_1^J d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cquqd1Re2223} & & & & & & & & & & & & & & & & & & &$ | cquqd1Re2221 | $(\bar{q}_2^I u_2)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{lllll} {\rm cquqd1Re2231} & & & & & & & & & & & & & & & & & & &$ | | $(\bar{q}_2^I u_2)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{llll} {\rm cquqd1Re2232} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2233} & (\bar{q}_2^Iu_2)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2311} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2312} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2313} & (\bar{q}_2^Iu_3)(\bar{q}_1^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2321} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2322} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2323} & (\bar{q}_2^Iu_3)(\bar{q}_2^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2331} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Id_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_2^Iu_3)(\bar{q}_3^Iu_3)(\bar{q}_3^Iu_3)(\bar{q}_3^Iu_3)(\bar{q}_3^Iu_3)(\bar{q}_3^Iu_3)(\bar{q}_3^Iu_3)(\bar{q}_3^Iu_3)(q$ | cquqd1Re2223 | $(\bar{q}_2^I u_2)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cquqd1Re2233} & & & & & & & & & & & & & & & & & & $ | | $(\bar{q}_2^I u_2)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cquqd1Re2233} & & & & & & & & & & & & & & & & & & $ | | $(\bar{q}_2^I u_2)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} {\rm cquqd1Re2312} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{1}^{I}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2313} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{1}^{I}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2321} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{2}^{I}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2322} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2323} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2331} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ \end{array}$ | | $(\bar{q}_2^I u_2)(\bar{q}_3^J d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | |
| $\begin{array}{lll} {\rm cquqd1Re2313} & (\bar{q}_{1}^{I}u_{3})(\bar{q}_{1}^{I}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2321} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2322} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2323} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2331} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cquqd1Re2311 | $(\bar{q}_2^I u_3)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} {\rm cquqd1Re2321} & (\bar{q}_{2}^{\bar{J}}u_{3})(\bar{q}_{2}^{\bar{J}}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2322} & (\bar{q}_{2}^{\bar{J}}u_{3})(\bar{q}_{2}^{\bar{J}}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2323} & (\bar{q}_{2}^{\bar{J}}u_{3})(\bar{q}_{2}^{\bar{J}}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2331} & (\bar{q}_{2}^{\bar{J}}u_{3})(\bar{q}_{3}^{\bar{J}}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_{2}^{\bar{J}}u_{3})(\bar{q}_{3}^{\bar{J}}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cquqd1Re2312 | | \mathbf{R} |
| $\begin{array}{lll} {\rm cquqd1Re2322} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2323} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2331} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Re2332} & (\bar{q}_{2}^{I}u_{3})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cquqd1Re2313 | | R |
| $\begin{array}{lll} {\sf cquqd1Re2323} & (\bar{q}_2^I u_3) (\bar{q}_2^J d_3) \varepsilon_{IJ} / {\sf TeV}^2 + {\rm h.c.} & {\rm R} \\ {\sf cquqd1Re2331} & (\bar{q}_2^I u_3) (\bar{q}_3^J d_1) \varepsilon_{IJ} / {\sf TeV}^2 + {\rm h.c.} & {\rm R} \\ {\sf cquqd1Re2332} & (\bar{q}_2^I u_3) (\bar{q}_3^J d_2) \varepsilon_{IJ} / {\sf TeV}^2 + {\rm h.c.} & {\rm R} \\ \end{array}$ | cquqd1Re2321 | $(\bar{q}_2^I u_3)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Re2331 $(\bar{q}_3^Iu_3)(\bar{q}_3^Jd_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R cquqd1Re2332 $(\bar{q}_3^Iu_3)(\bar{q}_3^Jd_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | | | |
| cquqd1Re2332 $(\bar{q}_2^I u_3)(\bar{q}_3^J d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Re2323 | | |
| cquqd1Re2332 $(\bar{q}_3^I u_3)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R cquqd1Re2333 $(\bar{q}_2^I u_3)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Re2331 | $(\bar{q}_2^I u_3)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Re2333 $(\bar{q}_3^I u_3)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | | $(\bar{q}_2^I u_3)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | |
| | cquqd1Re2333 | $(\bar{q}_2^I u_3)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| $\begin{array}{c} {\rm cquqd1Re3111} & (\bar{q}_3^1u_1)(\bar{q}_1^1d_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3112} & (\bar{q}_3^1u_1)(\bar{q}_1^1d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3113} & (\bar{q}_3^1u_1)(\bar{q}_1^1d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3121} & (\bar{q}_3^1u_1)(\bar{q}_2^1d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3122} & (\bar{q}_3^1u_1)(\bar{q}_2^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3123} & (\bar{q}_3^1u_1)(\bar{q}_2^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3133} & (\bar{q}_3^1u_1)(\bar{q}_3^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3131} & (\bar{q}_3^1u_1)(\bar{q}_3^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3133} & (\bar{q}_3^1u_1)(\bar{q}_3^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3212} & (\bar{q}_3^1u_2)(\bar{q}_1^1d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3212} & (\bar{q}_3^1u_2)(\bar{q}_1^1d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3212} & (\bar{q}_3^1u_2)(\bar{q}_1^1d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3221} & (\bar{q}_3^1u_2)(\bar{q}_1^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3222} & (\bar{q}_3^1u_2)(\bar{q}_2^1d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3222} & (\bar{q}_3^1u_2)(\bar{q}_2^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3223} & (\bar{q}_3^1u_2)(\bar{q}_2^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3223} & (\bar{q}_3^1u_2)(\bar{q}_2^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3223} & (\bar{q}_3^1u_2)(\bar{q}_2^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3223} & (\bar{q}_3^1u_2)(\bar{q}_3^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3323} & (\bar{q}_3^1u_2)(\bar{q}_3^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3321} & (\bar{q}_3^1u_3)(\bar{q}_1^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3321} & (\bar{q}_3^1u_3)(\bar{q}_1^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3322} & (\bar{q}_3^1u_3)(\bar{q}_1^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3323} & (\bar{q}_3^1u_3)(\bar{q}_1^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3323} & (\bar{q}_3^1u_3)(\bar{q}_3^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3323} & (\bar{q}_3^1u_3)(\bar{q}_3^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re3323} & (\bar{q}_3^1u_3)(\bar{q}_3^2d_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} \\ {\rm cquqd1Re333$ | WC name | Operator | Type |
|---|--------------|---|--------------|
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3111 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3112 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3113 | $(\bar{q}_3^I u_1)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3121 | $(\bar{q}_3^I u_1)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3122 | $(\bar{q}_3^I u_1)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3123 | $(\bar{q}_3^I u_1)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3131 | $(\bar{q}_3^I u_1)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3132 | $(\bar{q}_3^I u_1)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3133 | $(\bar{q}_3^I u_1)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3211 | $(\bar{q}_3^I u_2)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Re3212 | $(\bar{q}_3^I u_2)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3213 | $(\bar{q}_3^I u_2)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3221 | $(\bar{q}_3^I u_2)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3222 | $(\bar{q}_3^I u_2)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Re3223 | $(\bar{q}_3^I u_2)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Re3231 | $(\bar{q}_3^I u_2)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Re3232 | $(\bar{q}_3^I u_2)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3233 | $(\bar{q}_3^I u_2)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Re3311 | $(\bar{q}_3^I u_3)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Re3312 | $(\bar{q}_3^I u_3)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3313 | $(\bar{q}_3^I u_3)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3321 | $(\bar{q}_3^I u_3)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3322 | $(\bar{q}_3^I u_3)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3323 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3331 | | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Re3332 | $(\bar{q}_3^I u_3)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lllll} & c \\ \text{cquqd1Im1112} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{1}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1113} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{1}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1121} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1122} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1123} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1131} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1132} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1213} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1212} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1213} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1221} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1221} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1222} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1222} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \\ \text{cquqd1Im1222} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cquqd1Re3333 | $(\bar{q}_3^I u_3)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lllll} & c \\ \text{cquqd1Im1113} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{1}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1121} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1122} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1123} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1131} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1132} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1133} & i \\ (\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1211} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1212} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1221} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1221} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1222} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd1Im1222} & i \\ (\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2}) \varepsilon_{IJ} / \text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cquqd1Im1111 | $i(\bar{q}_1^I u_1)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im1112 | $i(\bar{q}_1^I u_1)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lllll} {\rm cquqd1Im1122} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1123} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1131} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1132} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1133} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1211} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1212} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1213} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1221} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1221} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{I}d_{2})\varepsilon_{IJ}/{\rm cquqd1}$ | cquqd1Im1113 | $i(\bar{q}_1^I u_1)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im1121 | $i(\bar{q}_1^I u_1)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cquqd1Im1123} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{2}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1131} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1132} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1133} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1211} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1212} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1213} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1221} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/{\rm TeV}^{2} + {\rm h.c.} & {\rm R} \\ {\rm cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/{\rm cquq} \\ $ | cquqd1Im1122 | $i(\bar{q}_1^I u_1)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{cquqd1Im1132} & & & & & & & & & & & & & & & & & & &$ | cquqd1Im1123 | $i(\bar{q}_1^I u_1)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} \mbox{cquqd1Im1133} & i(\bar{q}_{1}^{I}u_{1})(\bar{q}_{3}^{J}d_{3})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1211} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1212} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1213} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1221} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \end{array}$ | cquqd1Im1131 | $i(\bar{q}_1^I u_1)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lllll} & c \\ \text{quqd1Im1211} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{quqd1Im1212} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{quqd1Im1213} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{quqd1Im1221} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{quqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cquqd1Im1132 | $i(\bar{q}_1^I u_1)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im1133 | $i(\bar{q}_1^I u_1)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \mbox{cquqd1Im1213} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1221} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \end{array}$ | cquqd1Im1211 | | R |
| $\begin{array}{lll} \mbox{cquqd1Im1213} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{1}^{J}d_{3})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1221} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{1})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd1Im1222} & i(\bar{q}_{1}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \end{array}$ | cquqd1Im1212 | $i(\bar{q}_1^I u_2)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1222 $i(\bar{q}_1^I u_2)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Im1213 | $i(\bar{q}_1^I u_2)(\bar{q}_1^J d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1222 $i(\bar{q}_1^I u_2)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Im1221 | $i(\bar{q}_1^I u_2)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1223 $i(\bar{q}_1^I u_2)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd1Im1222 | $i(\bar{q}_1^I u_2)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| | cquqd1Im1223 | $i(\bar{q}_1^I u_2)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|--------------|--|--------------|
| cquqd1Im1231 | $i(\bar{q}_1^I u_2)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1232 | $i(\bar{q}_1^I u_2)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1233 | $i(\bar{q}_1^I u_2)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1311 | $i(\bar{q}_1^I u_3)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd1Im1312 | $i(\bar{q}_1^I u_3)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd1Im1313 | $i(\bar{q}_1^I u_3)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1321 | $i(\bar{q}_1^I u_3)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1322 | $i(\bar{q}_1^I u_3)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1323 | $i(\bar{q}_1^I u_3)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1331 | $i(\bar{q}_1^I u_3)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1332 | $i(\bar{q}_1^I u_3)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im1333 | $i(\bar{q}_1^I u_3)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2111 | $i(\bar{q}_2^I u_1)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2112 | $i(\bar{q}_2^I u_1)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2113 | $i(\bar{q}_2^I u_1)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2121 | $i(\bar{q}_2^I u_1)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2122 | $i(\bar{q}_2^I u_1)(\bar{q}_2^J d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2123 | $i(\bar{q}_2^I u_1)(\bar{q}_2^J d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2131 | $i(\bar{q}_2^I u_1)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2132 | $i(\bar{q}_2^I u_1)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2133 | $i(\bar{q}_2^I u_1)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2211 | $i(\bar{q}_2^I u_2)(\bar{q}_1^J d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2212 | $i(\bar{q}_2^I u_2)(\bar{q}_1^J d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2213 | $i(\bar{q}_2^I u_2)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2221 | $i(\bar{q}_2^I u_2)(\bar{q}_2^J d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2222 | $i(\bar{q}_{2}^{I}u_{2})(\bar{q}_{2}^{J}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2223 | $i(\bar{q}_2^I u_2)(\bar{q}_2^J d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2231 | $i(\bar{q}_2^I u_2)(\bar{q}_3^J d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2232 | $i(\bar{q}_2^I u_2)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2233 | $i(\bar{q}_2^I u_2)(\bar{q}_3^J d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2311 | $i(\bar{q}_2^I u_3)(\bar{q}_1^J d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2312 | $i(\bar{q}_2^I u_3)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2313 | $i(\bar{q}_2^I u_3)(\bar{q}_1^J d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2321 | $i(\bar{q}_2^I u_3)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd1Im2322 | $i(\bar{q}_2^I u_3)(\bar{q}_2^J d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2323 | $i(\bar{q}_2^I u_3)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2331 | $i(\bar{q}_2^I u_3)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2332 | $i(\bar{q}_2^I u_3)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im2333 | $i(\bar{q}_2^I u_3)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im3111 | $i(\bar{q}_3^I u_1)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im3112 | $i(\bar{q}_3^I u_1)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd1Im3113 | $i(\bar{q}_3^I u_1)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | WC name | Operator | Type |
|---|--------------|--|----------|
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3121 | | m R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3122 | $i(\bar{q}_3^I u_1)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3123 | | |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3131 | $i(\bar{q}_3^I u_1)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3132 | $i(\bar{q}_3^I u_1)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3133 | $i(\bar{q}_3^I u_1)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3211 | $i(\bar{q}_3^I u_2)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3212 | $i(\bar{q}_3^I u_2)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3213 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3221 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3222 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3223 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3231 | $i(\bar{q}_3^I u_2)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3232 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3233 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3311 | $i(\bar{q}_3^I u_3)(\bar{q}_1^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3312 | $i(\bar{q}_3^I u_3)(\bar{q}_1^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Im3313 | $i(\bar{q}_3^I u_3)(\bar{q}_1^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | cquqd1Im3321 | $i(\bar{q}_3^I u_3)(\bar{q}_2^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3322 | $i(\bar{q}_3^I u_3)(\bar{q}_2^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3323 | $i(\bar{q}_3^I u_3)(\bar{q}_2^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3331 | $i(\bar{q}_3^I u_3)(\bar{q}_3^J d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3332 | $i(\bar{q}_3^I u_3)(\bar{q}_3^J d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd1Im3333 | $i(\bar{q}_3^I u_3)(\bar{q}_3^J d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd8Re1111 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd8Re1112 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd8Re1113 | $(\bar{q}_1^I T^A u_1)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd8Re1121 | | R |
| $\begin{array}{lllll} & \text{cquqd8Re1131} & (\bar{q}_1^{\bar{I}} T^A u_1) (\bar{q}_3^{\bar{J}} T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1132} & (\bar{q}_1^{\bar{I}} T^A u_1) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1133} & (\bar{q}_1^{\bar{I}} T^A u_1) (\bar{q}_3^{\bar{J}} T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1211} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_1^{\bar{J}} T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1212} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_1^{\bar{J}} T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1213} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_1^{\bar{J}} T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1221} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_2^{\bar{J}} T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1222} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_2^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1223} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_2^{\bar{J}} T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1231} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u_2) (\bar{q}_3^{\bar{J}} T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_1^{\bar{I}} T^A u$ | cquqd8Re1122 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | cquqd8Re1123 | | ${ m R}$ |
| $\begin{array}{lllll} {\rm cquqd8Re1133} & & & & & & & & & & & & & & & & & & $ | cquqd8Re1131 | $(\bar{q}_1^I T^A u_1)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lllll} & \text{cquqd8Re1211} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{J}T^{A}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1212} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1213} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{J}T^{A}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1221} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1222} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1223} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1231} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ & \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}$ | cquqd8Re1132 | $(\bar{q}_1^I T^A u_1)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{cquqd8Re1212} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd8Re1213} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{J}T^{A}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd8Re1221} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd8Re1222} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd8Re1223} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd8Re1231} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | cquqd8Re1133 | | R |
| $\begin{array}{llll} {\rm cquqd8Re1213} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{1}^{J}T^{A}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd8Re1221} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd8Re1222} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd8Re1223} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd8Re1231} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | | $(\bar{q}_1^I T^A u_2)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm cquqd8Re1221} & & & & & & & & & & & & & & & & & \\ {\rm cquqd8Re1222} & & & & & & & & & & & & & & & & \\ {\rm cquqd8Re1222} & & & & & & & & & & & & & & & \\ {\rm cquqd8Re1223} & & & & & & & & & & & & & & \\ {\rm cquqd8Re1223} & & & & & & & & & & & & & \\ {\rm cquqd8Re1223} & & & & & & & & & & & & & \\ {\rm cquqd8Re1231} & & & & & & & & & & & & & \\ {\rm cquqd8Re1231} & & & & & & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & & \\ {\rm cquqd8Re1232} & & & & & & \\ {\rm cquqd8Re1232} & & & & & & \\ {\rm cquqd8Re1232} & & & & & & \\ {\rm cquqd8Re1232} & & & \\ {\rm cquqd8Re1232} & & & & \\ {\rm cquqd8Re1232} & & & & \\ {\rm cquqd8Re1232} & & \\ {\rm cquqd8Re1232} & & & \\ {\rm cquqd8Re1232} & & $ | cquqd8Re1212 | | R |
| $\begin{array}{lll} \mbox{cquqd8Re1222} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{2})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd8Re1223} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{3})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd8Re1231} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{1})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \mbox{cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\mbox{TeV}^{2} + \mbox{h.c.} & \mbox{R} \\ \end{array}$ | | | R |
| $\begin{array}{lll} {\rm cquqd8Re1223} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{2}^{J}T^{A}d_{3})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd8Re1231} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{1})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ {\rm cquqd8Re1232} & (\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/{\rm TeV^{2}} + {\rm h.c.} & {\rm R} \\ \end{array}$ | cquqd8Re1221 | | R |
| cquqd8Re1231 $(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R cquqd8Re1232 $(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | cquqd8Re1222 | | R |
| cquqd8Re1232 $(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | | | R |
| cquqd8Re1232 $(\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R cquqd8Re1233 $(\bar{q}_{1}^{I}T^{A}u_{2})(\bar{q}_{3}^{J}T^{A}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R | | | R |
| cquqd8Re1233 $(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | | $(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| | cquqd8Re1233 | $(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|--------------|---|--------------|
| cquqd8Re1311 | $(\bar{q}_1^I T^A u_3)(\bar{q}_1^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re1312 | $(\bar{q}_1^I T^A u_3)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re1313 | $(\bar{q}_1^I T^A u_3)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re1321 | $(\bar{q}_1^I T^A u_3)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re1322 | $(\bar{q}_1^I T^A u_3)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re1323 | $(\bar{q}_1^I T^A u_3)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re1331 | $(\bar{q}_1^I T^A u_3)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re1332 | $(\bar{q}_1^I T^A u_3)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re1333 | $(\bar{q}_1^I T^A u_3)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2111 | $(\bar{q}_2^I T^A u_1)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2112 | $(\bar{q}_2^I T^A u_1)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2113 | $(\bar{q}_2^I T^A u_1)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2121 | $(\bar{q}_2^I T^A u_1)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2122 | $(\bar{q}_2^I T^A u_1)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2123 | $(\bar{q}_2^I T^A u_1)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2131 | $(\bar{q}_2^I T^A u_1)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2132 | $(\bar{q}_2^I T^A u_1)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Re2133 | $(\bar{q}_2^I T^A u_1)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2211 | $(\bar{q}_2^I T^A u_2)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Re2212 | $(\bar{q}_2^I T^A u_2)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2213 | $(\bar{q}_2^I T^A u_2)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2221 | $(\bar{q}_2^I T^A u_2)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2222 | $(\bar{q}_2^I T^A u_2)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2223 | $(\bar{q}_2^I T^A u_2)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2231 | $(\bar{q}_2^I T^A u_2)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2232 | $(\bar{q}_2^I T^A u_2)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2233 | $(\bar{q}_2^I T^A u_2)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2311 | $(\bar{q}_2^I T^A u_3)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2312 | $(\bar{q}_2^I T^A u_3)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2313 | $(\bar{q}_2^I T^A u_3)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2321 | $(\bar{q}_2^I T^A u_3)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2322 | $(\bar{q}_2^I T^A u_3)(\bar{q}_2^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2323 | $(\bar{q}_2^I T^A u_3)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2331 | $(\bar{q}_2^I T^A u_3)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2332 | $(\bar{q}_2^I T^A u_3)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re2333 | $(\bar{q}_2^I T^A u_3)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re3111 | $(\bar{q}_3^I T^A u_1)(\bar{q}_1^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re3112 | $(\bar{q}_3^I T^A u_1)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re3113 | $(\bar{q}_3^I T^A u_1)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re3121 | $(\bar{q}_3^I T^A u_1)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Re3122 | $(\bar{q}_3^I T^A u_1)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| | $(\bar{q}_{3}^{I}T^{A}u_{1})(\bar{q}_{2}^{J}T^{A}d_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ | |

| WC name | Operator | Type |
|--------------|---|--------------|
| cquqd8Re3131 | $(\bar{q}_3^I T^A u_1)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3132 | $(\bar{q}_3^I T^A u_1)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3133 | $(\bar{q}_3^I T^A u_1)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3211 | $(\bar{q}_3^I T^A u_2)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3212 | $(\bar{q}_3^I T^A u_2)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3213 | $(\bar{q}_3^I T^A u_2)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3221 | $(\bar{q}_3^I T^A u_2)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Re3222 | $(\bar{q}_3^I T^A u_2)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Re3223 | $(\bar{q}_3^I T^A u_2)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3231 | $(\bar{q}_3^I T^A u_2)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3232 | $(\bar{q}_3^I T^A u_2)(\bar{q}_3^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3233 | $(\bar{q}_3^I T^A u_2)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3311 | $(\bar{q}_3^I T^A u_3)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3312 | $(\bar{q}_3^I T^A u_3)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3313 | $(\bar{q}_3^I T^A u_3)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3321 | $(\bar{q}_3^I T^A u_3)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Re3322 | $(\bar{q}_3^I T^A u_3)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Re3323 | $(\bar{q}_3^I T^A u_3)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Re3331 | $(\bar{q}_3^I T^A u_3)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Re3332 | $(\bar{q}_3^{\bar{I}}T^Au_3)(\bar{q}_3^{\bar{J}}T^Ad_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Re3333 | $(\bar{q}_3^I T^A u_3)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1111 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_1^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1112 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1113 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_1^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1121 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1122 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1123 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1131 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1132 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_3^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1133 | $i(\bar{q}_1^I T^A u_1)(\bar{q}_3^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1211 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1212 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_1^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1213 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1221 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1222 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1223 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1231 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im1232 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Im1233 | $i(\bar{q}_1^I T^A u_2)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Im1311 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_1^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1312 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_1^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1313 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_1^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|--------------|---|--------------|
| cquqd8Im1321 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1322 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_2^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1323 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1331 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_3^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1332 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_3^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im1333 | $i(\bar{q}_1^I T^A u_3)(\bar{q}_3^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im2111 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_1^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im2112 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_1^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im2113 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_1^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2121 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_2^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2122 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im2123 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im2131 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_3^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2132 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_3^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2133 | $i(\bar{q}_2^I T^A u_1)(\bar{q}_3^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2211 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_1^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2212 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_1^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2213 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2221 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_2^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2222 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2223 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2231 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2232 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2233 | $i(\bar{q}_2^I T^A u_2)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2311 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_1^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2312 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2313 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2321 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2322 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2323 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2331 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_3^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2332 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_3^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im2333 | $i(\bar{q}_2^I T^A u_3)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3111 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3112 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3113 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3121 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_2^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3122 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3123 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_2^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| cquqd8Im3131 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_3^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3132 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_3^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3133 | $i(\bar{q}_3^I T^A u_1)(\bar{q}_3^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|--------------|--|----------|
| cquqd8Im3211 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_1^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3212 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_1^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3213 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_1^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3221 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_2^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3222 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_2^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3223 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_2^J T^A d_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3231 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_3^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3232 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| cquqd8Im3233 | $i(\bar{q}_3^I T^A u_2)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3311 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_1^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3312 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_1^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3313 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_1^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3321 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_2^J T^A d_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3322 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_2^J T^A d_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3323 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_2^J T^A d_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3331 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_3^J T^A d_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3332 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_3^J T^A d_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| cquqd8Im3333 | $i(\bar{q}_3^I T^A u_3)(\bar{q}_3^J T^A d_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1111 | $(\bar{\ell}_1^I e_1)(\bar{q}_1^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1112 | $(\bar{\ell}_1^I e_1)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1113 | $(\bar{\ell}_1^I e_1)(\bar{q}_1^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1121 | $(\bar{\ell}_1^I e_1)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1122 | $(\bar{\ell}_1^I e_1)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1123 | $(\bar{\ell}_1^I e_1)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1131 | $(\bar{\ell}_1^{I}e_1)(\bar{q}_3^{J}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1132 | $(\bar{\ell}_1^I e_1)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1133 | $(\bar{\ell}_1^I e_1)(\bar{q}_3^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1211 | $(\bar{\ell}_1^I e_2)(\bar{q}_1^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1212 | $(\bar{\ell}_1^I e_2)(\bar{q}_1^J u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1213 | $(\bar{\ell}_1^I e_2)(\bar{q}_1^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1221 | $(\bar{\ell}_1^I e_2)(\bar{q}_2^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1222 | $(\bar{\ell}_1^I e_2)(\bar{q}_2^J u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1223 | $(\bar{\ell}_1^I e_2)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1231 | $(\bar{\ell}_1^I e_2)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1232 | $(\bar{\ell}_1^I e_2)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re1233 | $(\bar{\ell}_1^I e_2)(\bar{q}_3^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re1311 | $(\bar{\ell}_1^I e_3)(\bar{q}_1^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re1312 | $(\ell_1^I e_3)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re1313 | $(\bar{\ell}_1^I e_3)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re1321 | $(\bar{\ell}_{I}^{I}e_{3})(\bar{q}_{2}^{I}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ | R |
| clequ1Re1322 | $(\bar{\ell}_{I}^{I}e_{3})(\bar{q}_{2}^{J}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ | R |
| clequ1Re1323 | $(\bar{\ell}_1^I e_3)(\bar{q}_2^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| clequIRe1331 | WC name | Operator | Type |
|---|--------------|---|----------|
| clequ1Re1333 | clequ1Re1331 | | R |
| clequ1Re2111 | clequ1Re1332 | $(\bar{\ell}_1^I e_3)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re2112 | clequ1Re1333 | $(\bar{\ell}_1^I e_3)(\bar{q}_3^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re2113 | clequ1Re2111 | $(\bar{\ell}_2^I e_1)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re2113 | clequ1Re2112 | $(\bar{\ell}_2^I e_1)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Re2113 | $(\bar{\ell}_2^I e_1)(\bar{q}_1^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm clequ1Re2122} & & & & & & & & & & & & & & & & & & $ | clequ1Re2121 | $(\ell_2^I e_1)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ1Re2131} & & & & & & & & & & & & & & & & & & &$ | clequ1Re2122 | $(\bar{\ell}_2^I e_1)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re2132 | clequ1Re2123 | $(\bar{\ell}_2^I e_1)(\bar{q}_2^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re2113 | clequ1Re2131 | $(\bar{\ell}_2^I e_1)(\bar{q}_3^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2132 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2133 | $(\bar{\ell}_2^I e_1)(\bar{q}_3^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Re2211 | $(\bar{\ell}_2^I e_2)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Re2212 | $(\bar{\ell}_2^I e_2)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Re2213 | $(\bar{\ell}_2^I e_2)(\bar{q}_1^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2221 | $(\bar{\ell}_2^I e_2)(\bar{q}_2^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2222 | $(\bar{\ell}_2^I e_2)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2223 | $(\bar{\ell}_2^I e_2)(\bar{q}_2^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Re2231 | $(\bar{\ell}_2^I e_2)(\bar{q}_3^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Re2232 | $(\bar{\ell}_2^I e_2)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2233 | $(\bar{\ell}_2^I e_2)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2311 | $(\bar{\ell}_2^I e_3)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2312 | $(\bar{\ell}_2^I e_3)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2313 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re2321 | $(\bar{\ell}_2^I e_3)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Re2322 | $(\bar{\ell}_2^I e_3)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ1Re2332} & & & & & & & & & & & & & & & & & & &$ | clequ1Re2323 | $(\bar{\ell}_2^I e_3)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ1Re2333} & & & & & & & & & & & & & & & & & &$ | clequ1Re2331 | $(\bar{\ell}_2^I e_3)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ1Re2333} & & & & & & & & & & & & & & & & & &$ | clequ1Re2332 | $(\bar{\ell}_2^I e_3)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lllll} & \text{clequ1Re3111} & & & & & & & & & & & & & & & & & &$ | clequ1Re2333 | $(\bar{\ell}_2^I e_3)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ1Re3112} & & & & & & & & & & & & & & & & & & &$ | clequ1Re3111 | $(\ell_3^I e_1)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ1Re3113} & & & & & & & & & & & & & & & & & & &$ | clequ1Re3112 | $(\ell_3^I e_1)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ1Re3121} & & & & & & & & & & & & & & & & & & &$ | clequ1Re3113 | $(\bar{\ell}_3^I e_1)(\bar{q}_1^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ1Re3123} & & & & & & & & & & & & & & & & & & \\ & \text{clequ1Re3131} & & & & & & & & & & & & & & & & & & &$ | clequ1Re3121 | $(\bar{\ell}_3^I e_1)(\bar{q}_2^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ1Re3123} & & & & & & & & & & & & & & & & & & \\ & \text{clequ1Re3131} & & & & & & & & & & & & & & & & & & &$ | clequ1Re3122 | $(\bar{\ell}_3^I e_1)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3132 $ \begin{array}{ll} (\bar{\ell}_3^{\bar{I}}e_1)(\bar{q}_3^{\bar{J}}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ1Re3133} & (\bar{\ell}_3^{\bar{I}}e_1)(\bar{q}_3^{\bar{J}}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ1Re3211} & (\bar{\ell}_3^{\bar{I}}e_2)(\bar{q}_1^{\bar{I}}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ1Re3212} & (\bar{\ell}_3^{\bar{I}}e_2)(\bar{q}_1^{\bar{J}}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \end{array} $ | clequ1Re3123 | $(\bar{\ell}_3^I e_1)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3133 $(\bar{\ell}_3^I e_1)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3211 $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3212 $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Re3131 | | R |
| clequ1Re3133 $(\bar{\ell}_3^I e_1)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3211 $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3212 $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Re3132 | $(\bar{\ell}_3^I e_1)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Re3211 $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3212 $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Re3133 | $(\bar{\ell}_3^I e_1)(\bar{q}_3^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3212 $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Re3211 | $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3213 $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Re3212 | $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| | clequ1Re3213 | $(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| clequIRe3221 ($\bar{\ell}_3^1e_2$)($\bar{q}_2^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3222 ($\bar{\ell}_3^1e_2$)($\bar{q}_2^1u_2$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3223 ($\bar{\ell}_3^1e_2$)($\bar{q}_2^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3231 ($\bar{\ell}_3^1e_2$)($\bar{q}_3^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3232 ($\bar{\ell}_3^1e_2$)($\bar{q}_3^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3233 ($\bar{\ell}_3^1e_2$)($\bar{q}_3^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3311 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3312 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3313 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3312 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3321 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^2u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3322 ($\bar{\ell}_3^1e_3$)($\bar{q}_2^1u_1$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3323 ($\bar{\ell}_3^1e_3$)($\bar{q}_2^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3333 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_2$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3333 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIRe3333 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII11 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII11 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII11 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII11 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII11 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII11 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII11 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII12 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII12 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII13 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII121 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII121 ($\bar{\ell}_3^1e_3$)($\bar{\ell}_3^1u_3$) $\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequIIII12 | WC name | Operator | Type |
|---|--------------|--|--------------|
| clequ1Re3222 | clequ1Re3221 | $(\bar{\ell}_3^I e_2)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3223 | clequ1Re3222 | $(\bar{\ell}_3^I e_2)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3231 ($\bar{\ell}_3^1e_2$)($\bar{q}_3^1u_1$) ε_{IJ} /TeV ² + h.c. R clequ1Re3232 ($\bar{\ell}_3^1e_2$)($\bar{q}_3^1u_2$) ε_{IJ} /TeV ² + h.c. R clequ1Re3331 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^1u_1$) ε_{IJ} /TeV ² + h.c. R clequ1Re3311 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^1u_2$) ε_{IJ} /TeV ² + h.c. R clequ1Re3312 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^1u_2$) ε_{IJ} /TeV ² + h.c. R clequ1Re3313 ($\bar{\ell}_3^1e_3$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Re3321 ($\bar{\ell}_3^1e_3$)($\bar{q}_2^1u_1$) ε_{IJ} /TeV ² + h.c. R clequ1Re3322 ($\bar{\ell}_3^1e_3$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Re3323 ($\bar{\ell}_3^1e_3$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Re3332 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Re3333 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Re3333 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Re3333 ($\bar{\ell}_3^1e_3$)($\bar{q}_3^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1111 ($\bar{\ell}_1^1e_1$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1112 ($\bar{\ell}_1^1e_1$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1113 ($\bar{\ell}_1^1e_1$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1123 ($\bar{\ell}_1^1e_1$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1123 ($\bar{\ell}_1^1e_1$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1123 ($\bar{\ell}_1^1e_1$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1133 ($\bar{\ell}_1^1e_1$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1133 ($\bar{\ell}_1^1e_1$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im123 ($\bar{\ell}_1^1e_1$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1212 ($\bar{\ell}_1^1e_1$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1213 ($\bar{\ell}_1^1e_1$)($\bar{q}_2^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1213 ($\bar{\ell}_1^1e_2$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1213 ($\bar{\ell}_1^1e_2$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1213 ($\bar{\ell}_1^1e_2$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1213 ($\bar{\ell}_1^1e_2$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1213 ($\bar{\ell}_1^1e_2$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1Im1313 ($\bar{\ell}_1^1e_2$)($\bar{q}_1^1u_3$) ε_{IJ} /TeV ² + h.c. R clequ1 | clequ1Re3223 | $(\bar{\ell}_3^I e_2)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Re3233 | clequ1Re3231 | $(\bar{\ell}_3^I e_2)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3233 | clequ1Re3232 | $(\bar{\ell}_3^I e_2)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3312 | clequ1Re3233 | $(\bar{\ell}_3^I e_2)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3313 | clequ1Re3311 | $(\bar{\ell}_3^I e_3)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3321 ($(\overline{\ell_3}^1e_3)(\overline{q_2}^1u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3322 ($(\ell_3^1e_3)(\overline{q_2}^2u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3323 ($(\ell_3^1e_3)(\overline{q_2}^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3331 ($(\ell_3^1e_3)(\overline{q_3}^1u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3332 ($(\ell_3^1e_3)(\overline{q_3}^1u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3333 ($(\ell_3^1e_3)(\overline{q_3}^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1111 $(\ell_1^0e_1)(\overline{q_1^1}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1112 $(\ell_1^0e_1)(\overline{q_1^1}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1113 $(\ell_1^0e_1)(\overline{q_1^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1121 $(\ell_1^0e_1)(\overline{q_1^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1121 $(\ell_1^0e_1)(\overline{q_1^2}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1122 $(\ell_1^0e_1)(\overline{q_2^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1123 $(\ell_1^0e_1)(\overline{q_2^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1133 $(\ell_1^0e_1)(\overline{q_2^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1131 $(\ell_1^0e_1)(\overline{q_2^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1132 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1133 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1212 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1213 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1223 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1223 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1233 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1313 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1313 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1313 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1323 $(\ell_1^0e_1)(\overline{q_3^1}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text$ | clequ1Re3312 | $(\bar{\ell}_3^I e_3)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3322 $(\ell_3^l e_3)(\bar{q}_2^l u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3323 $(\ell_3^l e_3)(\bar{q}_2^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3331 $(\ell_3^l e_3)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3332 $(\ell_3^l e_3)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3332 $(\ell_3^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3333 $(\ell_3^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1111 $i(\ell_1^l e_1)(\bar{q}_1^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1112 $i(\ell_1^l e_1)(\bar{q}_1^l u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1112 $i(\ell_1^l e_1)(\bar{q}_1^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1121 $i(\ell_1^l e_1)(\bar{q}_2^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1122 $i(\ell_1^l e_1)(\bar{q}_2^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1123 $i(\ell_1^l e_1)(\bar{q}_2^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1131 $i(\ell_1^l e_1)(\bar{q}_2^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im131 $i(\ell_1^l e_1)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im132 $i(\ell_1^l e_1)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im133 $i(\ell_1^l e_1)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im121 $i(\ell_1^l e_1)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im121 $i(\ell_1^l e_2)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1212 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1213 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1221 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1223 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1231 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1231 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1321 $i(\ell_1^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1321 $i(\ell_1^l e_3)$ | clequ1Re3313 | $(\bar{\ell}_3^I e_3)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3322 $(\ell_3^l e_3)(\bar{q}_2^l u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3323 $(\ell_3^l e_3)(\bar{q}_2^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3331 $(\ell_3^l e_3)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3332 $(\ell_3^l e_3)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3332 $(\ell_3^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3333 $(\ell_3^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1111 $i(\ell_1^l e_1)(\bar{q}_1^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1112 $i(\ell_1^l e_1)(\bar{q}_1^l u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1112 $i(\ell_1^l e_1)(\bar{q}_1^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1121 $i(\ell_1^l e_1)(\bar{q}_2^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1122 $i(\ell_1^l e_1)(\bar{q}_2^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1123 $i(\ell_1^l e_1)(\bar{q}_2^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1131 $i(\ell_1^l e_1)(\bar{q}_2^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im131 $i(\ell_1^l e_1)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im132 $i(\ell_1^l e_1)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im133 $i(\ell_1^l e_1)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im121 $i(\ell_1^l e_1)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im121 $i(\ell_1^l e_2)(\bar{q}_3^l u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1212 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1213 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1221 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1223 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1231 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1231 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $i(\ell_1^l e_2)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1321 $i(\ell_1^l e_3)(\bar{q}_3^l u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1321 $i(\ell_1^l e_3)$ | clequ1Re3321 | $(\bar{\ell}_3^I e_3)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3331 | clequ1Re3322 | $(\bar{\ell}_3^I e_3)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3332 $(\ell_3^l e_3)(\bar{q}_3^l u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3333 $(\ell_3^l e_3)(\bar{q}_3^l u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1111 $i(\ell_1^l e_1)(\bar{q}_1^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1112 $i(\ell_1^l e_1)(\bar{q}_1^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1113 $i(\ell_1^l e_1)(\bar{q}_2^l u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1121 $i(\ell_1^l e_1)(\bar{q}_2^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1122 $i(\ell_1^l e_1)(\bar{q}_2^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1123 $i(\ell_1^l e_1)(\bar{q}_2^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1133 $i(\ell_1^l e_1)(\bar{q}_2^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im133 $i(\ell_1^l e_1)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im133 $i(\ell_1^l e_1)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im133 $i(\ell_1^l e_1)(\bar{q}_3^l u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im121 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im121 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1212 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1213 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1221 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1222 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1223 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1231 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1232 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1331 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1313 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1322 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1331 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/Te$ | clequ1Re3323 | $(\bar{\ell}_3^I e_3)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Re3332 $(\ell_3^l e_3)(\bar{q}_3^l u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Re3333 $(\ell_3^l e_3)(\bar{q}_3^l u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1111 $i(\ell_1^l e_1)(\bar{q}_1^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1112 $i(\ell_1^l e_1)(\bar{q}_1^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1113 $i(\ell_1^l e_1)(\bar{q}_2^l u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1121 $i(\ell_1^l e_1)(\bar{q}_2^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1122 $i(\ell_1^l e_1)(\bar{q}_2^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1123 $i(\ell_1^l e_1)(\bar{q}_2^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1133 $i(\ell_1^l e_1)(\bar{q}_2^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im133 $i(\ell_1^l e_1)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im133 $i(\ell_1^l e_1)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im133 $i(\ell_1^l e_1)(\bar{q}_3^l u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im121 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im121 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1212 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1213 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1221 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1222 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1223 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1231 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1232 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1331 $i(\ell_1^l e_2)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1311 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1313 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1312 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1322 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1331 $i(\ell_1^l e_3)(\bar{q}_3^l u_1)\varepsilon_{IJ}/Te$ | clequ1Re3331 | $(\bar{\ell}_3^I e_3)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re3332 | $(\bar{\ell}_3^I e_3)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Re3333 | $(\bar{\ell}_3^I e_3)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1111 | $i(\bar{\ell}_1^I e_1)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1112 | $i(\bar{\ell}_1^I e_1)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1113 | $i(\ell_1^I e_1)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1121 | $i(\bar{\ell}_1^I e_1)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1122 | $i(\bar{\ell}_1^I e_1)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1123 | $i(\bar{\ell}_1^I e_1)(\bar{q}_2^J u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1131 | $i(\bar{\ell}_1^I e_1)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Im1132 | $i(\bar{\ell}_1^I e_1)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ1Im1133 | $i(\bar{\ell}_1^I e_1)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1211 | $i(\bar{\ell}_1^I e_2)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1212 | $i(\bar{\ell}_1^I e_2)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1213 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1221 | $i(\bar{\ell}_1^I e_2)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1222 | $i(\bar{\ell}_1^I e_2)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1223 | $i(\bar{\ell}_1^I e_2)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1231 | $i(\bar{\ell}_1^I e_2)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1232 | $i(\bar{\ell}_1^I e_2)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1233 | $i(\bar{\ell}_1^I e_2)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ1Im1313} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{1}^{J}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1321} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{2}^{J}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1322} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{2}^{J}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1323} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{2}^{J}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1331} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{3}^{J}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1332} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{3}^{J}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ1Im1311 | $i(\bar{\ell}_1^I e_3)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ1Im1321} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{2}^{J}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1322} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{2}^{J}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1323} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{2}^{J}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1331} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{3}^{J}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ1Im1332} & i(\bar{\ell}_{1}^{I}e_{3})(\bar{q}_{3}^{J}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ1Im1312 | $i(\bar{\ell}_1^I e_3)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ1Im1313 | $i(\bar{\ell}_1^I e_3)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im1323 $i(\bar{\ell}_1^{\bar{I}}e_3)(\bar{q}_2^{\bar{J}}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1331 $i(\bar{\ell}_1^{\bar{I}}e_3)(\bar{q}_3^{\bar{J}}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1332 $i(\bar{\ell}_1^{\bar{I}}e_3)(\bar{q}_3^{\bar{J}}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Im1321 | $i(\bar{\ell}_1^I e_3)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im1331 $i(\bar{\ell}_1^{\bar{I}}e_3)(\bar{q}_3^{\bar{J}}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im1332 $i(\bar{\ell}_1^{\bar{I}}e_3)(\bar{q}_3^{\bar{J}}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Im1322 | | R |
| clequ1Im1332 $i(\bar{\ell}_1^I e_3)(\bar{q}_3^J u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Im1323 | $i(\bar{\ell}_1^I e_3)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im1332 $i(\bar{\ell}_1^I e_3)(\bar{q}_3^J u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Im1331 | $i(\bar{\ell}_1^I e_3)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im1333 $i(\bar{\ell}_1^I e_3)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ1Im1332 | $i(\bar{\ell}_1^I e_3)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| | clequ1Im1333 | $i(\bar{\ell}_1^I e_3)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|--------------|---|--------------|
| clequ1Im2111 | $i(\bar{\ell}_2^I e_1)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2112 | $i(\bar{\ell}_{1}^{I}e_{1})(\bar{q}_{1}^{I}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ | \mathbf{R} |
| clequ1Im2113 | $i(\overline{\ell_2^I}e_1)(\overline{q}_1^Ju_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Im2121 | $i(\bar{\ell}_2^I e_1)(\bar{q}_2^I u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Im2122 | $i(\bar{\ell}_2^I e_1)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Im2123 | $i(\bar{\ell}_2^I e_1)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2131 | $i(\bar{\ell}_2^I e_1)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2132 | $i(\bar{\ell}_2^{I}e_1)(\bar{q}_3^{J}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2133 | $i(\bar{\ell}_2^{\bar{I}}e_1)(\bar{q}_3^{\bar{J}}u_3)\varepsilon_{I\bar{J}}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2211 | $i(\bar{\ell}_2^{\bar{I}}e_2)(\bar{q}_1^{\bar{J}}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2212 | $i(\bar{\ell}_2^{\bar{I}}e_2)(\bar{q}_1^{\bar{J}}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Im2213 | $i(\bar{\ell}_2^I e_2)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ1Im2221 | $i(\bar{\ell}_2^I e_2)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Im2222 | $i(\bar{\ell}_2^I e_2)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2223 | $i(\bar{\ell}_2^I e_2)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Im2231 | $i(\bar{\ell}_2^I e_2)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2232 | $i(\bar{\ell}_2^I e_2)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2233 | $i(\ell_2^I e_2)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2311 | $i(\bar{\ell}_2^I e_3)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2312 | $i(\bar{\ell}_2^I e_3)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2313 | $i(\bar{\ell}_2^I e_3)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2321 | $i(\bar{\ell}_2^I e_3)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2322 | $i(\bar{\ell}_2^I e_3)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2323 | $i(\bar{\ell}_2^I e_3)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2331 | $i(\bar{\ell}_2^I e_3)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2332 | $i(\bar{\ell}_2^I e_3)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im2333 | $i(\bar{\ell}_2^I e_3)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3111 | $i(\bar{\ell}_3^I e_1)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3112 | $i(\bar{\ell}_3^I e_1)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3113 | $i(\bar{\ell}_3^I e_1)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3121 | $i(\bar{\ell}_3^I e_1)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3122 | $i(\bar{\ell}_3^I e_1)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3123 | $i(\bar{\ell}_3^I e_1)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3131 | $i(\bar{\ell}_3^I e_1)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3132 | $i(\bar{\ell}_3^I e_1)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3133 | $i(\bar{\ell}_3^I e_1)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3211 | $i(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3212 | $i(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3213 | $i(\bar{\ell}_3^I e_2)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3221 | $i(\bar{\ell}_3^I e_2)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3222 | $i(\bar{\ell}_3^I e_2)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3223 | $i(\bar{\ell}_3^{\bar{I}}e_2)(\bar{q}_2^{\bar{J}}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| | | |

| clequ1Im3231 $i(\ell_3^1e_2)(\bar{q}_3^1u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3232 $i(\ell_3^1e_2)(\bar{q}_3^1u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3233 $i(\ell_3^1e_2)(\bar{q}_3^1u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3311 $i(\ell_3^1e_3)(\bar{q}_1^1u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3312 $i(\ell_3^1e_3)(\bar{q}_1^1u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3313 $i(\ell_3^1e_3)(\bar{q}_1^1u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3312 $i(\ell_3^1e_3)(\bar{q}_1^1u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3321 $i(\ell_3^1e_3)(\bar{q}_2^1u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3322 $i(\ell_3^1e_3)(\bar{q}_2^1u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3323 $i(\ell_3^1e_3)(\bar{q}_2^1u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(\ell_3^1e_3)(\bar{q}_3^2u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(\ell_3^1e_3)(\bar{q}_3^2u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(\ell_3^1e_3)(\bar{q}_3^2u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^2\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^2\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1211 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1232 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R cleq | WC name | Operator | Type |
|---|--------------|---|--------------|
| clequ1Im3333 | clequ1Im3231 | | R |
| clequ1Im3311 $i(\bar{\ell}_3^1e_3)(\bar{q}_1^1u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3312 $i(\bar{\ell}_3^1e_3)(\bar{q}_1^1u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3313 $i(\bar{\ell}_3^1e_3)(\bar{q}_1^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3321 $i(\bar{\ell}_3^1e_3)(\bar{q}_2^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3322 $i(\bar{\ell}_3^1e_3)(\bar{q}_2^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3323 $i(\bar{\ell}_3^1e_3)(\bar{q}_3^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3323 $i(\bar{\ell}_3^1e_3)(\bar{q}_3^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3331 $i(\bar{\ell}_3^1e_3)(\bar{q}_3^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3332 $i(\bar{\ell}_3^1e_3)(\bar{q}_3^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(\bar{\ell}_3^1e_3)(\bar{q}_3^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1113 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1124 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1331 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_3)(\bar{q}_2^1\sigma^{\mu\nu}u$ | clequ1Im3232 | | |
| clequ1Im3312 $i(\bar{\ell}_3^1e_3)(\bar{q}_1^1u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3313 $i(\bar{\ell}_3^1e_3)(\bar{q}_1^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3321 $i(\bar{\ell}_3^1e_3)(\bar{q}_2^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3322 $i(\bar{\ell}_3^1e_3)(\bar{q}_2^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3323 $i(\bar{\ell}_3^1e_3)(\bar{q}_2^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3331 $i(\bar{\ell}_3^1e_3)(\bar{q}_2^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3332 $i(\bar{\ell}_3^1e_3)(\bar{q}_3^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3332 $i(\bar{\ell}_3^1e_3)(\bar{q}_3^1u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1311 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma_{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma_{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma_{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1113 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma_{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1222 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1323 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1311 $(\bar{\ell}_1^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma_{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1321 $(\bar{\ell}_1^1\sigma_{\mu$ | clequ1Im3233 | $i(\bar{\ell}_3^I e_2)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3313 $i(\ell_3^1 e_3)(\bar{q}_1^1 u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3321 $i(\ell_3^1 e_3)(\bar{q}_2^1 u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3322 $i(\ell_3^1 e_3)(\bar{q}_2^1 u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3323 $i(\ell_3^1 e_3)(\bar{q}_2^1 u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3331 $i(\ell_3^1 e_3)(\bar{q}_3^1 u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3332 $i(\ell_3^1 e_3)(\bar{q}_3^1 u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(\ell_3^1 e_3)(\bar{q}_3^1 u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1211 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1331 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1331 $(\ell_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/$ | clequ1Im3311 | $i(\bar{\ell}_3^I e_3)(\bar{q}_1^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Im3321 $i(\ell_3^1e_3)(\bar{q}_2^1u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3322 $i(\ell_3^1e_3)(\bar{q}_2^1u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3323 $i(\ell_3^1e_3)(\bar{q}_3^1u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3331 $i(\ell_3^1e_3)(\bar{q}_3^1u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3332 $i(\ell_3^1e_3)(\bar{q}_3^1u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(\ell_3^1e_3)(\bar{q}_3^1u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1113 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1211 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1211 $(\ell_1^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1233 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\ell_1^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1312 $(\ell_1^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1321 $(\ell_1^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ | clequ1Im3312 | $i(\bar{\ell}_3^I e_3)(\bar{q}_1^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3322 $i(l_3^2e_3)(\bar{q}_2^2u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3323 $i(l_3^2e_3)(\bar{q}_2^2u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3331 $i(l_3^2e_3)(\bar{q}_3^2u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3332 $i(l_3^2e_3)(\bar{q}_3^2u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(l_3^2e_3)(\bar{q}_3^2u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1113 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re133 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1211 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1232 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1331 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1332 $(l_1^2\sigma_{\mu\nu}e_3)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1332 $(l_1^2\sigma_{\mu\nu}e_3)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + h.c.$ | clequ1Im3313 | $i(\bar{\ell}_3^I e_3)(\bar{q}_1^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Im3322 $i(l_3^2e_3)(\bar{q}_2^2u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3323 $i(l_3^2e_3)(\bar{q}_2^2u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3331 $i(l_3^2e_3)(\bar{q}_3^2u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3332 $i(l_3^2e_3)(\bar{q}_3^2u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(l_3^2e_3)(\bar{q}_3^2u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1113 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re133 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1211 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(l_1^2\sigma_{\mu\nu}e_1)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1232 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_2^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1331 $(l_1^2\sigma_{\mu\nu}e_2)(\bar{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1332 $(l_1^2\sigma_{\mu\nu}e_3)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1332 $(l_1^2\sigma_{\mu\nu}e_3)(\bar{q}_1^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + h.c.$ | clequ1Im3321 | $i(\bar{\ell}_3^I e_3)(\bar{q}_2^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3331 $i(\overline{\ell_3}e_3)(\overline{q_3}^Ju_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3332 $i(\overline{\ell_3}e_3)(\overline{q_3}^Ju_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(\overline{\ell_3}e_3)(\overline{q_3}^Ju_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_1}J^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_1}J^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_2}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_2}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_2}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_3}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_3}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_3}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\overline{\ell_1}\sigma_{\mu\nu}e_1)(\overline{q_3}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1222 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_2}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_2}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_2}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1323 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_2}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1331 $(\overline{\ell_1}\sigma_{\mu\nu}e_2)(\overline{q_2}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1331 $(\overline{\ell_1}\sigma_{\mu\nu}e_3)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1332 $(\overline{\ell_1}\sigma_{\mu\nu}e_3)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1332 $(\overline{\ell_1}\sigma_{\mu\nu}e_3)(\overline{q_1}J^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + h.$ | clequ1Im3322 | $i(\ell_3^I e_3)(\bar{q}_2^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ1Im3332 $i(\bar{\ell}_3^1 e_3)(\bar{q}_3^1 u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ1Im3333 $i(\bar{\ell}_3^1 e_3)(\bar{q}_3^1 u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1113 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1132 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1211 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1212 $(\ell_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1213 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1222 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1311 $(\ell_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1312 $(\ell_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1312 $(\ell_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1321 $(\ell_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1321 $(\ell_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text$ | clequ1Im3323 | $i(\bar{\ell}_3^I e_3)(\bar{q}_2^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ1Im3333 $i(\bar{\ell}_3^1 e_3)(\bar{q}_3^1 u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1111 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1112 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1113 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1121 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1122 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1123 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_2^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1131 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1133 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1211 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_1)(\bar{q}_3^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1221 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1222 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1223 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1231 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1323 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_2)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1311 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1312 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1313 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^1 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1321 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re1332 $(\bar{\ell}_1^1 \sigma_{\mu\nu} e_3)(\bar{q}_1^2 \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + h.c$ | clequ1Im3331 | $i(\bar{\ell}_3^I e_3)(\bar{q}_3^J u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Re1111 | clequ1Im3332 | $i(\bar{\ell}_3^I e_3)(\bar{q}_3^J u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re1112 | clequ1Im3333 | $i(\bar{\ell}_3^I e_3)(\bar{q}_3^J u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Re1113 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1121 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{1}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1122 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{1}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1123 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1131 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1132 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1133 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1133 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1211 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1212 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1213 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1221 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1222 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1223 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1231 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{2})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1232 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{2})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1311 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1312 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1313 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{1}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1322 $ (\bar{\ell}_{1}^{\bar{1}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{2}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} $ clequ3Re1333 $ (\bar{\ell}_{1}^$ | clequ3Re1111 | $(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re1121 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_1)(\overline{\ell_2^J}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1122 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_1)(\overline{\ell_2^J}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1123 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_1)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1131 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_1)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1132 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_1)(\overline{\ell_3^J}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1133 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_1)(\overline{\ell_3^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1133 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_1)(\overline{\ell_3^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1211 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_1^I}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1212 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_1^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1213 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_1^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1221 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1222 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1223 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1231 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1232 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1331 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_2)(\overline{\ell_3^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1311 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_3)(\overline{\ell_3^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1312 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_3)(\overline{\ell_3^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1323 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_3)(\overline{\ell_1^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1323 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_3)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1323 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_3)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1331 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_3)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1332 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_3)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \qquad \text{R}$ clequ3Re1333 $(\overline{\ell_1^I}\sigma_{\mu\nu}e_3)(\overline{\ell_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2$ | clequ3Re1112 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ3Re1113 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ3Re1121 | | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ3Re1122 | $(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ3Re1123 | | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | - | $(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Re1211 $ \begin{array}{ccccccccccccccccccccccccccccccccccc$ | | | R |
| $\begin{array}{llll} \text{clequ3Re1212} & & & & & & & & & & & & & & & & & & &$ | clequ3Re1133 | | R |
| $\begin{array}{llll} \text{clequ3Re1213} & & & & & & & & & & & & & & & & & & &$ | clequ3Re1211 | | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ3Re1212 | | R |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ3Re1213 | | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | - | | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ3Re1222 | | \mathbf{R} |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | clequ3Re1223 | | R |
| $\begin{array}{llll} \text{clequ3Re1233} & & & & & & & & & & & & & & & & & & $ | clequ3Re1231 | | R |
| $\begin{array}{llll} \text{clequ3Re1311} & & & & & & & & & & & & & & & & & & $ | clequ3Re1232 | $(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llll} \text{clequ3Re1312} & & & & & & & & & & & & & & & & & & &$ | clequ3Re1233 | $(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ3Re1313} & & & & & & & & & & & & & & & & & & &$ | clequ3Re1311 | $(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ3Re1313} & & & & & & & & & & & & & & & & & & &$ | clequ3Re1312 | $(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ3Re1322} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1323} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1331} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1332} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1333} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2111} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2112} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Re1313 | $(\ell_1^I \sigma_{\mu\nu} e_3) (\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} \text{clequ3Re1323} & (\bar{\ell}_{1}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1331} & (\bar{\ell}_{1}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1332} & (\bar{\ell}_{1}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1333} & (\bar{\ell}_{1}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2111} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2112} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Re1321 | $(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ3Re1331} & (\bar{\ell}_{1}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1332} & (\bar{\ell}_{1}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1333} & (\bar{\ell}_{1}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2111} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2112} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Re1322 | | R |
| $\begin{array}{lll} \text{clequ3Re1332} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re1333} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2111} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2112} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Re1323 | | R |
| clequ3Re1333 $ \begin{array}{ll} (\bar{\ell}_{1}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2111} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Re2112} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \end{array} $ | clequ3Re1331 | | R |
| clequ3Re2111 $(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_1^{\bar{J}}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Re2112 $(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_1^{\bar{J}}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ3Re1332 | | R |
| clequ3Re2112 $(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ3Re1333 | | R |
| | clequ3Re2111 | | R |
| clequ3Re2113 $(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | - | | R |
| | clequ3Re2113 | $(\ell_2^I \sigma_{\mu\nu} e_1) (\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |

| clequ3Re2121 $ \begin{array}{ll} (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2122} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2123} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2131} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2132} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2133} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2211} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2212} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2213} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{\ell}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^$ | R R R R R R R R |
|--|--------------------------------------|
| $\begin{array}{lll} \text{clequ3Re2123} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2131} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2132} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2133} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2211} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2212} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2213} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \end{array}$ | R R R R R R R |
| $\begin{array}{lll} \text{clequ3Re2131} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2132} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2133} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2211} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2212} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2213} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \end{array}$ | R R R R R R |
| $\begin{array}{lll} \text{clequ3Re2132} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2133} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2211} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{I}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2212} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{I}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2213} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{I}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{I}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \end{array}$ | R R R R R |
| $\begin{array}{ll} \text{clequ3Re2133} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2211} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2212} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2213} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \end{array}$ | R R R R R |
| $\begin{array}{ll} \text{clequ3Re2133} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2211} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2212} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2213} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \end{array}$ | R R R R |
| $\begin{array}{ll} \text{clequ3Re2211} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2212} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2213} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{J}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{J}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \end{array}$ | R R R |
| $\begin{array}{ll} \text{clequ3Re2212} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2213} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \end{array}$ | R R R |
| $\begin{array}{ll} \text{clequ3Re2213} & (\bar{\ell}_{I}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2221} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2222} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2223} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_{I}^{J}\sigma_{\mu\nu}e_{2})(\bar{q}_{I}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} \\ \end{array}$ | R R |
| clequ3Re2222 $(\bar{\ell}_{2}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ clequ3Re2223 $(\bar{\ell}_{2}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ clequ3Re2231 $(\bar{\ell}_{2}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ | \mathbf{R} |
| clequ3Re2223 $ \begin{array}{ll} (\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_2)(\bar{q}_2^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \\ \text{clequ3Re2231} & (\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_2)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} \end{array} $ | |
| clequ3Re2231 $(ar{\ell}_2^I\sigma_{\mu\nu}e_2)(ar{q}_3^J\sigma^{\mu\nu}u_1)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | D |
| clequ3Re2231 $(ar\ell_2^I\sigma_{\mu\nu}e_2)(ar q_3^J\sigma^{\mu\nu}u_1)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | \mathbf{R} |
| \overline{A} or one \overline{A} \overline{A} \overline{A} \overline{A} \overline{A} \overline{A} | R |
| clequ3Re2232 $(ar{\ell}_2^I\sigma_{\mu\nu}e_2)(ar{q}_3^J\sigma^{\mu\nu}u_2)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re2233 $(ar{\ell}_2^I\sigma_{\mu\nu}e_2)(ar{q}_3^J\sigma^{\mu\nu}u_3)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re2311 $(ar{\ell}_2^I\sigma_{\mu\nu}e_3)(ar{q}_1^J\sigma^{\mu\nu}u_1)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re2312 $(ar\ell_2^I\sigma_{\mu\nu}e_3)(ar q_1^J\sigma^{\mu\nu}u_2)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re2313 $(ar{\ell}_2^I\sigma_{\mu\nu}e_3)(ar{q}_1^J\sigma^{\mu\nu}u_3)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re2321 $(ar{\ell}_2^I \sigma_{\mu\nu} e_3) (ar{q}_2^J \sigma^{\mu\nu} u_1) arepsilon_{IJ} / 	ext{TeV}^2 + 	ext{h.c.}$ | R |
| clequ3Re2322 $(ar{\ell}_2^I\sigma_{\mu\nu}e_3)(ar{q}_2^J\sigma^{\mu\nu}u_2)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re2323 $(\bar{\ell}_2^I \sigma_{\mu\nu} e_3) (\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re2331 $(ar{\ell}_2^I \sigma_{\mu\nu} e_3) (ar{q}_3^J \sigma^{\mu\nu} u_1) arepsilon_{IJ}/{ m TeV}^2 + { m h.c.}$ | R |
| clequ3Re2332 $(ar\ell_2^I\sigma_{\mu\nu}e_3)(ar q_3^J\sigma^{\mu\nu}u_2)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re2333 $(\bar{\ell}_2^I \sigma_{\mu\nu} e_3) (\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3111 $(ar{\ell}_3^I\sigma_{\mu\nu}e_1)(ar{q}_1^J\sigma^{\mu\nu}u_1)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re3112 $(ar{\ell}_3^I\sigma_{\mu\nu}e_1)(ar{q}_1^J\sigma^{\mu\nu}u_2)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re3113 $(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3121 $(ar{\ell}_3^I\sigma_{\mu\nu}e_1)(ar{q}_2^J\sigma^{\mu\nu}u_1)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re3122 $(ar{\ell}_3^I\sigma_{\mu\nu}e_1)(ar{q}_2^J\sigma^{\mu\nu}u_2)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re3123 $(ar{\ell}_3^I\sigma_{\mu\nu}e_1)(ar{q}_2^J\sigma^{\mu\nu}u_3)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re3131 $(ar{\ell}_3^I\sigma_{\mu\nu}e_1)(ar{q}_3^J\sigma^{\mu\nu}u_1)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re3132 $(\bar{\ell}_3^I \sigma_{\mu\nu} e_1) (\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3133 $(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3211 $(ar{\ell}_3^I\sigma_{\mu\nu}e_2)(ar{q}_1^J\sigma^{\mu\nu}u_1)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | R |
| clequ3Re3212 $(\bar{\ell}_3^{I}\sigma_{\mu\nu}e_2)(\bar{q}_1^{J}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3213 $(\bar{\ell}_3^I \sigma_{\mu\nu} e_2) (\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3221 $(\bar{\ell}_3^{J}\sigma_{\mu\nu}e_2)(\bar{q}_2^{J}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Re3222 $(\bar{\ell}_3^I\sigma_{\mu\nu}e_2)(\bar{q}_2^J\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Re3223 $(\bar{\ell}_3^I \sigma_{\mu\nu} e_2) (\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ} / \text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Re3231 $(ar{\ell}_3^I\sigma_{\mu\nu}e_2)(ar{q}_3^J\sigma^{\mu\nu}u_1)arepsilon_{IJ}/	ext{TeV}^2+	ext{h.c.}$ | \mathbf{R} |
| clequ3Re3232 $(\bar{\ell}_3^{I}\sigma_{\mu\nu}e_2)(\bar{q}_3^{J}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Re3233 $(\bar{\ell}_3^{I}\sigma_{\mu\nu}e_2)(\bar{q}_3^{J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |

| WC name | Operator | Type |
|--------------|--|----------|
| clequ3Re3311 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3312 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3313 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3321 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3322 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3323 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3331 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3332 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Re3333 | $(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1111 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1112 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1113 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1121 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1122 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1123 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1131 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1132 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1133 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1211 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1212 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1213 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1221 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1222 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1223 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1231 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1232 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1233 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1311 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1312 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1313 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1321 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1322 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1323 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1331 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1332 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im1333 | $i(\bar{\ell}_1^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2111 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2112 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2113 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2121 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2122 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2123 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |

| clequ3Im2131 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_1)(\bar{q}_3^l \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2132 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_1)(\bar{q}_3^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2133 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_1)(\bar{q}_3^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2131 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_1^l \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2212 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_1^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2213 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_1^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2214 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_1^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2215 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_2^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2216 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_2^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2221 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_2^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2223 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_2^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_3^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_3^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2311 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_2)(\bar{q}_3^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_3)(\bar{q}_1^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_3)(\bar{q}_1^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_3)(\bar{q}_1^l \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_3)(\bar{q}_2^l \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2332 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_3)(\bar{q}_2^l \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_3)(\bar{q}_2^l \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2331 $i(\bar{\ell}_2^l \sigma_{\mu\nu} e_3)(\bar{q}_2^l \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\bar{\ell}_3^l \sigma_{\mu\nu} e_1)(\bar{q}_1^l \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3113 $i(\bar{\ell}_3^l \sigma_{\mu\nu} e_1)(\bar{q}_1^l \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\bar{\ell}_3^l \sigma_{\mu\nu} e_1)(\bar{q}_1^$ | WC name | Operator | Type |
|---|--------------|--|--------------|
| clequ3Im2133 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_1)(\overline{q}_3^3J^{\sigma\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2211 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_1^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2212 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2213 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2221 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_2^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2222 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_2^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2223 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_2^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_3^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2232 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_3^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_2)(\overline{q}_3^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2311 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_1^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_1^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_1^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_1^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2322 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_2^2\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_2^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_3^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_3^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3111 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_3^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3111 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_3)(\overline{q}_3^2\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\frac{\overline{\ell}_2}{\ell_2}\sigma_{\mu\nu}e_1)(\overline{q}_1^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3113 $i(\frac{\overline{\ell}_2}{\ell_3}\sigma_{\mu\nu}e_1)(\overline{q}_1^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\frac{\overline{\ell}_2}{\ell_3}\sigma_{\mu\nu}e_1)(\overline{q}_1^2\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\overline{$ | clequ3Im2131 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ3Im2211 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_1^{1}\sigma^{\mu\nu}u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2212 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_1^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2213 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_1^{1}\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2221 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_2^{1}\sigma^{\mu\nu}u_3)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2222 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_2^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2223 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_2^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_3^{1}\sigma^{\mu\nu}u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2232 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_3^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_3^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_2)(\overline{q}_3^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2311 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_1^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_1^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_2^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_2^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2322 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_2^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_2^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_3^{1}\sigma^{\mu\nu}u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\frac{\overline{\ell}_2}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_3^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3113 $i(\frac{\overline{\ell}_3}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_3^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3121 $i(\frac{\overline{\ell}_3}{\overline{\ell}}\sigma_{\mu\nu}e_3)(\overline{q}_3^{1}\sigma^{\mu\nu}u_2)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3121 $i(\frac{\overline{\ell}_3}{\overline{\ell}}\sigma_{\mu\nu}e_1)(\overline{q}_1^{1}\sigma^{\mu\nu}u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\frac{\overline{\ell}_3}{\overline{\ell}}\sigma_{\mu\nu}e_1)(\overline{q}_1^{1}\sigma^{\mu\nu}u_1)\epsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3121 $i(\frac{\overline{\ell}_3}{\overline{\ell}}\sigma_{\mu\nu}e_1)(\overline$ | clequ3Im2132 | | R |
| clequ3Im2212 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_2)(\overline{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2213 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_2)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2221 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_2)(\overline{q}_2^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2222 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_2)(\overline{q}_2^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2223 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_2)(\overline{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_2)(\overline{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2232 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_2)(\overline{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_2)(\overline{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2311 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2322 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_3^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_3^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\overline{\ell}_2^1\sigma_{\mu\nu}e_3)(\overline{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3111 $i(\overline{\ell}_3^1\sigma_{\mu\nu}e_3)(\overline{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\overline{\ell}_3^1\sigma_{\mu\nu}e_3)(\overline{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\overline{\ell}_3^1\sigma_{\mu\nu}e_1)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3121 $i(\overline{\ell}_3^1\sigma_{\mu\nu}e_1)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3121 $i(\overline{\ell}_3^1\sigma_{\mu\nu}e_1)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\overline{\ell}_3^1\sigma_{\mu\nu}e_1)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3133 $i(\overline{\ell}_3^1\sigma_{\mu\nu}e_1)(\overline{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + h.c.$ | clequ3Im2133 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2213 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_2)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2221 $i(\ell_2^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2222 $i(\ell_2^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2223 $i(\ell_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\ell_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2232 $i(\ell_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\ell_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\ell_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2311 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_2^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_2^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2322 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_2^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2331 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2332 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3113 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3113 $i(\ell_2^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3111 $i(\ell_3^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\ell_3^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im313 $i(\ell_3^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im313 $i(\ell_3^1\sigma_{\mu\nu}e_1)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text$ | clequ3Im2211 | | R |
| clequ3Im2221 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2222 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_2)(\bar{q}_2^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2232 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_2)(\bar{q}_3^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2311 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2311 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2322 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_2^1\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_2^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2332 $i(\bar{\ell}_2^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3113 $i(\bar{\ell}_3^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3111 $i(\bar{\ell}_3^1\sigma_{\mu\nu}e_3)(\bar{q}_3^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\bar{\ell}_3^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3113 $i(\bar{\ell}_3^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\bar{\ell}_3^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im313 $i(\bar{\ell}_3^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im313 $i(\bar{\ell}_3^1\sigma_{\mu\nu}e_1)(\bar{q}_1^1\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | clequ3Im2212 | | R |
| clequ3Im2222 $i(\ell_2^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\ell_2^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\ell_2^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2232 $i(\ell_2^J \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\ell_2^J \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2322 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3111 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3121 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3131 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3131 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3211 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3212 $i(\ell_3^J \sigma_{\mu\nu} $ | clequ3Im2213 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_2)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2222 $i(\ell_2^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\ell_2^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\ell_2^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2232 $i(\ell_2^J \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2233 $i(\ell_2^J \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2231 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2322 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\ell_2^J \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3111 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3121 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3123 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3131 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3131 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3211 $i(\ell_3^J \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3212 $i(\ell_3^J \sigma_{\mu\nu} $ | clequ3Im2221 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ3Im2222 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm clequ3Im2232} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_2)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2233} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_2)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2311} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_1^{\bar{J}}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2312} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_1^{\bar{J}}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2313} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_1^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2321} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_2^{\bar{J}}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2322} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_2^{\bar{J}}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2323} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_2^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2333} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2332} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2333} & i(\bar{\ell}_2^{\bar{J}}\sigma_{\mu\nu}e_3)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3111} & i(\bar{\ell}_3^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_1^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3112} & i(\bar{\ell}_3^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_1^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3113} & i(\bar{\ell}_3^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_1^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3122} & i(\bar{\ell}_3^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_2^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3123} & i(\bar{\ell}_3^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_2^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3132} & i(\bar{\ell}_3^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3213} & i(\bar{\ell}_3^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3213} & i(\bar{\ell}_3^{\bar{J}}\sigma_{\mu\nu}e_1)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3213} & i(\bar$ | clequ3Im2223 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2233 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_2)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2311 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_1^J\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2312 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_1^J\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2313 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_1^J\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2321 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_2^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2322 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_2^J\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2323 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_2^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2331 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2332 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im2333 $i(\overline{\ell_2^J}\sigma_{\mu\nu}e_3)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3111 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_3)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3112 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_3)(\overline{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3113 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3120 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3122 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_2^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3133 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_2^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3131 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_2^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3131 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3132 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3132 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3231 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_1)(\overline{q}_3^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3211 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_2)(\overline{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3212 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_2)(\overline{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3213 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_2)(\overline{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3221 $i(\overline{\ell_3^J}\sigma_{\mu\nu}e_2)(\overline{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + h.c.$ | clequ3Im2231 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ3Im2232 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} {\rm clequ3Im2312} & i(\bar{\ell}_2^I\sigma_{\mu\nu}e_3)(\bar{q}_1^J\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2313} & i(\bar{\ell}_2^I\sigma_{\mu\nu}e_3)(\bar{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2321} & i(\bar{\ell}_2^I\sigma_{\mu\nu}e_3)(\bar{q}_2^J\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2322} & i(\bar{\ell}_2^I\sigma_{\mu\nu}e_3)(\bar{q}_2^J\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2323} & i(\bar{\ell}_2^I\sigma_{\mu\nu}e_3)(\bar{q}_2^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2331} & i(\bar{\ell}_2^I\sigma_{\mu\nu}e_3)(\bar{q}_3^J\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2332} & i(\bar{\ell}_2^I\sigma_{\mu\nu}e_3)(\bar{q}_3^J\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im2333} & i(\bar{\ell}_2^I\sigma_{\mu\nu}e_3)(\bar{q}_3^J\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3111} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_3^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3112} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_1^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3112} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_1^J\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3121} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_2^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3122} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_2^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3123} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_2^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3132} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_3^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3133} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_3^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3213} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_3^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3212} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_1)(\bar{q}_3^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3213} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_2)(\bar{q}_1^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3221} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_2)(\bar{q}_1^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3222} & i(\bar{\ell}_3^I\sigma_{\mu\nu}e_2)(\bar{q}_1^I\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/{\rm TeV}^2 + {\rm h.c.} & {\rm R} \\ {\rm clequ3Im3223} & i$ | clequ3Im2233 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ3Im2311 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2321 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2322 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2323 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2331 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2332 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2333 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3111 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3112 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3113 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3121 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3122 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3123 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3131 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3212 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3212 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3221 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3222 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ | clequ3Im2312 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ3Im2322} & i(\overline{\ell_2^I}\sigma_{\mu\nu}e_3)(\overline{q_2^J}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im2323} & i(\overline{\ell_2^I}\sigma_{\mu\nu}e_3)(\overline{q_2^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im2331} & i(\overline{\ell_2^I}\sigma_{\mu\nu}e_3)(\overline{q_3^J}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im2332} & i(\overline{\ell_2^I}\sigma_{\mu\nu}e_3)(\overline{q_3^J}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im2333} & i(\overline{\ell_2^I}\sigma_{\mu\nu}e_3)(\overline{q_3^J}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3111} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_1^I}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3112} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_1^I}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3113} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_1^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3121} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_2^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3122} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_2^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3123} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_2^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_2^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_3^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_3^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_3^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_1)(\overline{q_3^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_2)(\overline{q_1^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_2)(\overline{q_1^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_2)(\overline{q_1^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_2)(\overline{q_1^J}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_2)(\overline{q_2^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\overline{\ell_3^I}\sigma_{\mu\nu}e_2)(\overline{q_2^I}\sigma^{\mu\nu}u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.} & \text{R} \\ clequ3Im32$ | clequ3Im2313 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2323 $i(\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2331 $i(\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2332 $i(\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2333 $i(\bar{\ell}_{2}^{I}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3111 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3112 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{I}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3113 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3121 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3122 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{I}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3123 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{I}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3131 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3211 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3212 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3221 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3221 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3222 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3223 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{I}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R | clequ3Im2321 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2331 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2332 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2333 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3111 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3112 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3113 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3121 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3122 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3123 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3131 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3214 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3221 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3222 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3223 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R | clequ3Im2322 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2331 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2332 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2333 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3111 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3112 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3113 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3121 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3122 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3123 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3131 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3214 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3221 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3222 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3223 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R | clequ3Im2323 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im2332 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im2333 $i(\bar{\ell}_{2}^{\bar{l}}\sigma_{\mu\nu}e_{3})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3111 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3112 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3113 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3121 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3122 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3123 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3131 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3132 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3133 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3211 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3212 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3213 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3221 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3221 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3222 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3223 $i(\bar{\ell}_{3}^{\bar{l}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{l}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R | clequ3Im2331 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | clequ3Im2332 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ3Im3112} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3113} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3121} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3122} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3123} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3131} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3132} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im2333 | $i(\bar{\ell}_2^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ3Im3112} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3113} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3121} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3122} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3123} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3131} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3132} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3111 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{llll} \text{clequ3Im3113} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3121} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3122} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3123} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3131} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3132} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3112 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| $\begin{array}{lll} \text{clequ3Im3122} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3123} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3131} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3132} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3113 | | R |
| $\begin{array}{lll} \text{clequ3Im3123} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3131} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3132} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3121 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ3Im3131} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3132} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{J}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3122 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ3Im3132} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3133} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3123 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ3Im3133} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{1})(\bar{q}_{3}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3131 | | R |
| $\begin{array}{lll} \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3132 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ3Im3211} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3133 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_1)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| $\begin{array}{lll} \text{clequ3Im3212} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{I}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3213} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{1}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3221} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3222} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \text{clequ3Im3223} & i(\bar{\ell}_{3}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.} & \text{R} \\ \end{array}$ | clequ3Im3211 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_1^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im3221 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{1})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3222 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{2})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R clequ3Im3223 $i(\bar{\ell}_{3}^{I}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{J}\sigma^{\mu\nu}u_{3})\varepsilon_{IJ}/\text{TeV}^{2} + \text{h.c.}$ R | clequ3Im3212 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_1^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Im3222 $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3223 $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ3Im3213 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im3222 $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R clequ3Im3223 $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ3Im3221 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| | clequ3Im3222 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_2^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clegu3Im3231 $i(\bar{\ell}_{2}^{\bar{I}}\sigma_{\mu\nu}e_{2})(\bar{q}_{2}^{\bar{J}}\sigma^{\mu\nu}u_{1})\varepsilon_{II}/\text{TeV}^{2} + \text{h.c.}$ R | clequ3Im3223 | | \mathbf{R} |
| 1 (1) μν - Δ/ (1) (1) (1) (1) (1) (1) | clequ3Im3231 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Im3232 $i(\bar{\ell}_3^{\bar{I}}\sigma_{\mu\nu}e_2)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ3Im3232 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | ${ m R}$ |
| clequ3Im3233 $i(\ell_3^I \sigma_{\mu\nu} e_2)(\bar{q}_3^J \sigma^{\mu\nu} u_3)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | _ | | ${ m R}$ |
| clequ3Im3311 $i(\ell_3^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ3Im3311 | | R |
| clequ3Im3312 $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ3Im3312 | | ${ m R}$ |
| clequ3Im3313 $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_1^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ R | clequ3Im3313 | | R |

| WC name | Operator | Type |
|--------------|---|--------------|
| clequ3Im3321 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_1) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | R |
| clequ3Im3322 | $i(\bar{\ell}_3^{\bar{I}}\sigma_{\mu\nu}e_3)(\bar{q}_2^{\bar{J}}\sigma^{\mu\nu}u_2)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Im3323 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_2^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Im3331 | $i(\bar{\ell}_3^{\bar{I}}\sigma_{\mu\nu}e_3)(\bar{q}_3^{\bar{J}}\sigma^{\mu\nu}u_1)\varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Im3332 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_2) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |
| clequ3Im3333 | $i(\bar{\ell}_3^I \sigma_{\mu\nu} e_3)(\bar{q}_3^J \sigma^{\mu\nu} u_3) \varepsilon_{IJ}/\text{TeV}^2 + \text{h.c.}$ | \mathbf{R} |