# Basis `Warsaw mass` (EFT `SMEFT`)

Variant of the Warsaw basis where all fermion fields are rotated such as to make their mass matrices diagonal. This rotation breaks $SU(2)_L$ invariance and is ambiguous for some operators. We adhere to the choice of arXiv:1704.03888 by Dedes, Materkowska, Paraskevas, Rosiek, and Suxho, which coincides with the "tilded" basis in arXiv:1512.02830 by Aebischer, Crivellin, Fael, and Greub.

## Sectors

`dB=dL=0`

| WC name | Operator | Type |
|---|---|---|
| G | $f^{ABC}G_\mu^{A\nu}G_\nu^{B\rho}G_\rho^{C\mu}$ | R |
| Gtilde | $f^{ABC}\widetilde{G}_\mu^{A\nu}G_\nu^{B\rho}G_\rho^{C\mu}$ | R |
| W | $\epsilon^{IJK}W_\mu^{I\nu}W_\nu^{J\rho}W_\rho^{K\mu}$ | R |
| Wtilde | $\epsilon^{IJK}\widetilde{W}_\mu^{I\nu}W_\nu^{J\rho}W_\rho^{K\mu}$ | R |
| phi | $\left(\varphi^\dagger\varphi\right)^3$ | R |
| phiBox | $\left(\varphi^\dagger\varphi\right)\Box\left(\varphi^\dagger\varphi\right)$ | R |
| phiD | $\left(\varphi^\dagger D^\mu\varphi\right)^*\left(\varphi^\dagger D_\mu\varphi\right)$ | R |
| phiG | $\varphi^\dagger\varphi G_{\mu\nu}^A G^{A\mu\nu}$ | R |
| phiB | $\varphi^\dagger\varphi B_{\mu\nu}B^{\mu\nu}$ | R |
| phiW | $\varphi^\dagger\varphi W_{\mu\nu}^I W^{I\mu\nu}$ | R |
| phiWB | $\varphi^\dagger\tau^I\varphi W_{\mu\nu}^I B^{\mu\nu}$ | R |
| phiGtilde | $\varphi^\dagger\varphi\widetilde{G}_{\mu\nu}^A G^{A\mu\nu}$ | R |
| phiBtilde | $\varphi^\dagger\varphi\widetilde{B}_{\mu\nu}B^{\mu\nu}$ | R |
| phiWtilde | $\varphi^\dagger\varphi\widetilde{W}_{\mu\nu}^I W^{I\mu\nu}$ | R |
| phiWtildeB | $\varphi^\dagger\tau^I\varphi\widetilde{W}_{\mu\nu}^I B^{\mu\nu}$ | R |
| uphi_11 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 u_1\widetilde{\varphi}\right)$ | C |
| uphi_12 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 u_2\widetilde{\varphi}\right)$ | C |
| uphi_13 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 u_3\widetilde{\varphi}\right)$ | C |
| uphi_21 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 u_1\widetilde{\varphi}\right)$ | C |
| uphi_22 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 u_2\widetilde{\varphi}\right)$ | C |
| uphi_23 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 u_3\widetilde{\varphi}\right)$ | C |
| uphi_31 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 u_1\widetilde{\varphi}\right)$ | C |
| uphi_32 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 u_2\widetilde{\varphi}\right)$ | C |
| uphi_33 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 u_3\widetilde{\varphi}\right)$ | C |
| dphi_11 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 d_1\varphi\right)$ | C |
| dphi_12 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 d_2\varphi\right)$ | C |
| dphi_13 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 d_3\varphi\right)$ | C |
| dphi_21 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 d_1\varphi\right)$ | C |
| dphi_22 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 d_2\varphi\right)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| dphi_23 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 d_3\varphi\right)$ | C |
| dphi_31 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 d_1\varphi\right)$ | C |
| dphi_32 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 d_2\varphi\right)$ | C |
| dphi_33 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 d_3\varphi\right)$ | C |
| ephi_11 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_1 e_1\varphi\right)$ | C |
| ephi_12 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_1 e_2\varphi\right)$ | C |
| ephi_13 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_1 e_3\varphi\right)$ | C |
| ephi_21 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_2 e_1\varphi\right)$ | C |
| ephi_22 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_2 e_2\varphi\right)$ | C |
| ephi_23 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_2 e_3\varphi\right)$ | C |
| ephi_31 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_3 e_1\varphi\right)$ | C |
| ephi_32 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_3 e_2\varphi\right)$ | C |
| ephi_33 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_3 e_3\varphi\right)$ | C |
| eW_11 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_1\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_12 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_2\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_13 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_3\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_21 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_1\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_22 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_2\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_23 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_3\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_31 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_1\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_32 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_2\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_33 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_3\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eB_11 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_1\right)\varphi B_{\mu\nu}$ | C |
| eB_12 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_2\right)\varphi B_{\mu\nu}$ | C |
| eB_13 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_3\right)\varphi B_{\mu\nu}$ | C |
| eB_21 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_1\right)\varphi B_{\mu\nu}$ | C |
| eB_22 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_2\right)\varphi B_{\mu\nu}$ | C |
| eB_23 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_3\right)\varphi B_{\mu\nu}$ | C |
| eB_31 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_1\right)\varphi B_{\mu\nu}$ | C |
| eB_32 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_2\right)\varphi B_{\mu\nu}$ | C |
| eB_33 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_3\right)\varphi B_{\mu\nu}$ | C |
| uG_11 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A u_1\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uG_12 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A u_2\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uG_13 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A u_3\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uG_21 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A u_1\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uG_22 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A u_2\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uG_23 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A u_3\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uG_31 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A u_1\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uG_32 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A u_2\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uG_33 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A u_3\right)\widetilde{\varphi}G^A_{\mu\nu}$ | C |
| uW_11 | $\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)\tau^I\widetilde{\varphi}W^I_{\mu\nu}$ | C |
| uW_12 | $\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)\tau^I\widetilde{\varphi}W^I_{\mu\nu}$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| uW_13 | $\left(\bar{q}_1 \sigma^{\mu\nu} u_3\right) \tau^I \widetilde{\varphi} W_{\mu\nu}^I$ | C |
| uW_21 | $\left(\bar{q}_2 \sigma^{\mu\nu} u_1\right) \tau^I \widetilde{\varphi} W_{\mu\nu}^I$ | C |
| uW_22 | $\left(\bar{q}_2 \sigma^{\mu\nu} u_2\right) \tau^I \widetilde{\varphi} W_{\mu\nu}^I$ | C |
| uW_23 | $\left(\bar{q}_2 \sigma^{\mu\nu} u_3\right) \tau^I \widetilde{\varphi} W_{\mu\nu}^I$ | C |
| uW_31 | $\left(\bar{q}_3 \sigma^{\mu\nu} u_1\right) \tau^I \widetilde{\varphi} W_{\mu\nu}^I$ | C |
| uW_32 | $\left(\bar{q}_3 \sigma^{\mu\nu} u_2\right) \tau^I \widetilde{\varphi} W_{\mu\nu}^I$ | C |
| uW_33 | $\left(\bar{q}_3 \sigma^{\mu\nu} u_3\right) \tau^I \widetilde{\varphi} W_{\mu\nu}^I$ | C |
| uB_11 | $\left(\bar{q}_1 \sigma^{\mu\nu} u_1\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| uB_12 | $\left(\bar{q}_1 \sigma^{\mu\nu} u_2\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| uB_13 | $\left(\bar{q}_1 \sigma^{\mu\nu} u_3\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| uB_21 | $\left(\bar{q}_2 \sigma^{\mu\nu} u_1\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| uB_22 | $\left(\bar{q}_2 \sigma^{\mu\nu} u_2\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| uB_23 | $\left(\bar{q}_2 \sigma^{\mu\nu} u_3\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| uB_31 | $\left(\bar{q}_3 \sigma^{\mu\nu} u_1\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| uB_32 | $\left(\bar{q}_3 \sigma^{\mu\nu} u_2\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| uB_33 | $\left(\bar{q}_3 \sigma^{\mu\nu} u_3\right) \widetilde{\varphi} B_{\mu\nu}$ | C |
| dG_11 | $\left(\bar{q}_1 \sigma^{\mu\nu} T^A d_1\right) \varphi G_{\mu\nu}^A$ | C |
| dG_12 | $\left(\bar{q}_1 \sigma^{\mu\nu} T^A d_2\right) \varphi G_{\mu\nu}^A$ | C |
| dG_13 | $\left(\bar{q}_1 \sigma^{\mu\nu} T^A d_3\right) \varphi G_{\mu\nu}^A$ | C |
| dG_21 | $\left(\bar{q}_2 \sigma^{\mu\nu} T^A d_1\right) \varphi G_{\mu\nu}^A$ | C |
| dG_22 | $\left(\bar{q}_2 \sigma^{\mu\nu} T^A d_2\right) \varphi G_{\mu\nu}^A$ | C |
| dG_23 | $\left(\bar{q}_2 \sigma^{\mu\nu} T^A d_3\right) \varphi G_{\mu\nu}^A$ | C |
| dG_31 | $\left(\bar{q}_3 \sigma^{\mu\nu} T^A d_1\right) \varphi G_{\mu\nu}^A$ | C |
| dG_32 | $\left(\bar{q}_3 \sigma^{\mu\nu} T^A d_2\right) \varphi G_{\mu\nu}^A$ | C |
| dG_33 | $\left(\bar{q}_3 \sigma^{\mu\nu} T^A d_3\right) \varphi G_{\mu\nu}^A$ | C |
| dW_11 | $\left(\bar{q}_1 \sigma^{\mu\nu} d_1\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dW_12 | $\left(\bar{q}_1 \sigma^{\mu\nu} d_2\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dW_13 | $\left(\bar{q}_1 \sigma^{\mu\nu} d_3\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dW_21 | $\left(\bar{q}_2 \sigma^{\mu\nu} d_1\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dW_22 | $\left(\bar{q}_2 \sigma^{\mu\nu} d_2\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dW_23 | $\left(\bar{q}_2 \sigma^{\mu\nu} d_3\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dW_31 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_1\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dW_32 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_2\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dW_33 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_3\right) \tau^I \varphi W_{\mu\nu}^I$ | C |
| dB_11 | $\left(\bar{q}_1 \sigma^{\mu\nu} d_1\right) \varphi B_{\mu\nu}$ | C |
| dB_12 | $\left(\bar{q}_1 \sigma^{\mu\nu} d_2\right) \varphi B_{\mu\nu}$ | C |
| dB_13 | $\left(\bar{q}_1 \sigma^{\mu\nu} d_3\right) \varphi B_{\mu\nu}$ | C |
| dB_21 | $\left(\bar{q}_2 \sigma^{\mu\nu} d_1\right) \varphi B_{\mu\nu}$ | C |
| dB_22 | $\left(\bar{q}_2 \sigma^{\mu\nu} d_2\right) \varphi B_{\mu\nu}$ | C |
| dB_23 | $\left(\bar{q}_2 \sigma^{\mu\nu} d_3\right) \varphi B_{\mu\nu}$ | C |
| dB_31 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_1\right) \varphi B_{\mu\nu}$ | C |
| dB_32 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_2\right) \varphi B_{\mu\nu}$ | C |
| dB_33 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_3\right) \varphi B_{\mu\nu}$ | C |

| WC name | Operator | Type |
|---|---|---|
| phil1_11 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{\ell}_1\gamma^\mu\ell_1)$ | R |
| phil1_12 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{\ell}_1\gamma^\mu\ell_2)$ | C |
| phil1_13 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{\ell}_1\gamma^\mu\ell_3)$ | C |
| phil1_22 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{\ell}_2\gamma^\mu\ell_2)$ | R |
| phil1_23 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{\ell}_2\gamma^\mu\ell_3)$ | C |
| phil1_33 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{\ell}_3\gamma^\mu\ell_3)$ | R |
| phil3_11 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)(\bar{\ell}_1\tau^I\gamma^\mu\ell_1)$ | R |
| phil3_12 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)(\bar{\ell}_1\tau^I\gamma^\mu\ell_2)$ | C |
| phil3_13 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)(\bar{\ell}_1\tau^I\gamma^\mu\ell_3)$ | C |
| phil3_22 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)(\bar{\ell}_2\tau^I\gamma^\mu\ell_2)$ | R |
| phil3_23 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)(\bar{\ell}_2\tau^I\gamma^\mu\ell_3)$ | C |
| phil3_33 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)(\bar{\ell}_3\tau^I\gamma^\mu\ell_3)$ | R |
| phie_11 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{e}_1\gamma^\mu e_1)$ | R |
| phie_12 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{e}_1\gamma^\mu e_2)$ | C |
| phie_13 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{e}_1\gamma^\mu e_3)$ | C |
| phie_22 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{e}_2\gamma^\mu e_2)$ | R |
| phie_23 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{e}_2\gamma^\mu e_3)$ | C |
| phie_33 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{e}_3\gamma^\mu e_3)$ | R |
| phiq1_11 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{q}_1\gamma^\mu q_1)$ | R |
| phiq1_12 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{q}_1\gamma^\mu q_2)$ | C |
| phiq1_13 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{q}_1\gamma^\mu q_3)$ | C |
| phiq1_22 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{q}_2\gamma^\mu q_2)$ | R |

| WC name | Operator | Type |
| --- | --- | --- |
| `phiq1_23` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{q}_2\gamma^\mu q_3)$ | C |
| `phiq1_33` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{q}_3\gamma^\mu q_3)$ | R |
| `phiq3_11` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}Imu\varphi\right)(\bar{q}_1\tau^I\gamma^\mu q_1)$ | R |
| `phiq3_12` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}Imu\varphi\right)(\bar{q}_1\tau^I\gamma^\mu q_2)$ | C |
| `phiq3_13` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}Imu\varphi\right)(\bar{q}_1\tau^I\gamma^\mu q_3)$ | C |
| `phiq3_22` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}Imu\varphi\right)(\bar{q}_2\tau^I\gamma^\mu q_2)$ | R |
| `phiq3_23` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}Imu\varphi\right)(\bar{q}_2\tau^I\gamma^\mu q_3)$ | C |
| `phiq3_33` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}Imu\varphi\right)(\bar{q}_3\tau^I\gamma^\mu q_3)$ | R |
| `phiu_11` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{u}_1\gamma^\mu u_1)$ | R |
| `phiu_12` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{u}_1\gamma^\mu u_2)$ | C |
| `phiu_13` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{u}_1\gamma^\mu u_3)$ | C |
| `phiu_22` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{u}_2\gamma^\mu u_2)$ | R |
| `phiu_23` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{u}_2\gamma^\mu u_3)$ | C |
| `phiu_33` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{u}_3\gamma^\mu u_3)$ | R |
| `phid_11` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{d}_1\gamma^\mu d_1)$ | R |
| `phid_12` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{d}_1\gamma^\mu d_2)$ | C |
| `phid_13` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{d}_1\gamma^\mu d_3)$ | C |
| `phid_22` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{d}_2\gamma^\mu d_2)$ | R |
| `phid_23` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{d}_2\gamma^\mu d_3)$ | C |
| `phid_33` | $\left(\varphi^\dagger i\overset{\leftrightarrow}{D}_\mu\varphi\right)(\bar{d}_3\gamma^\mu d_3)$ | R |
| `phiud_11` | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)(\bar{u}_1\gamma^\mu d_1)$ | C |
| `phiud_12` | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)(\bar{u}_1\gamma^\mu d_2)$ | C |
| `phiud_13` | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)(\bar{u}_1\gamma^\mu d_3)$ | C |
| `phiud_21` | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)(\bar{u}_2\gamma^\mu d_1)$ | C |

| WC name | Operator | Type |
|---|---|---|
| phiud_22 | $\left(\widetilde{\varphi}^\dagger i D_\mu \varphi\right)\left(\bar{u}_2 \gamma^\mu d_2\right)$ | C |
| phiud_23 | $\left(\widetilde{\varphi}^\dagger i D_\mu \varphi\right)\left(\bar{u}_2 \gamma^\mu d_3\right)$ | C |
| phiud_31 | $\left(\widetilde{\varphi}^\dagger i D_\mu \varphi\right)\left(\bar{u}_3 \gamma^\mu d_1\right)$ | C |
| phiud_32 | $\left(\widetilde{\varphi}^\dagger i D_\mu \varphi\right)\left(\bar{u}_3 \gamma^\mu d_2\right)$ | C |
| phiud_33 | $\left(\widetilde{\varphi}^\dagger i D_\mu \varphi\right)\left(\bar{u}_3 \gamma^\mu d_3\right)$ | C |
| ll_1111 | $\left(\bar{\ell}_1 \gamma_\mu \ell_1\right)\left(\bar{\ell}_1 \gamma^\mu \ell_1\right)$ | R |
| ll_1112 | $\left(\bar{\ell}_1 \gamma_\mu \ell_1\right)\left(\bar{\ell}_1 \gamma^\mu \ell_2\right)$ | C |
| ll_1113 | $\left(\bar{\ell}_1 \gamma_\mu \ell_1\right)\left(\bar{\ell}_1 \gamma^\mu \ell_3\right)$ | C |
| ll_1122 | $\left(\bar{\ell}_1 \gamma_\mu \ell_1\right)\left(\bar{\ell}_2 \gamma^\mu \ell_2\right)$ | R |
| ll_1123 | $\left(\bar{\ell}_1 \gamma_\mu \ell_1\right)\left(\bar{\ell}_2 \gamma^\mu \ell_3\right)$ | C |
| ll_1133 | $\left(\bar{\ell}_1 \gamma_\mu \ell_1\right)\left(\bar{\ell}_3 \gamma^\mu \ell_3\right)$ | R |
| ll_1212 | $\left(\bar{\ell}_1 \gamma_\mu \ell_2\right)\left(\bar{\ell}_1 \gamma^\mu \ell_2\right)$ | C |
| ll_1213 | $\left(\bar{\ell}_1 \gamma_\mu \ell_2\right)\left(\bar{\ell}_1 \gamma^\mu \ell_3\right)$ | C |
| ll_1221 | $\left(\bar{\ell}_1 \gamma_\mu \ell_2\right)\left(\bar{\ell}_2 \gamma^\mu \ell_1\right)$ | R |
| ll_1222 | $\left(\bar{\ell}_1 \gamma_\mu \ell_2\right)\left(\bar{\ell}_2 \gamma^\mu \ell_2\right)$ | C |
| ll_1223 | $\left(\bar{\ell}_1 \gamma_\mu \ell_2\right)\left(\bar{\ell}_2 \gamma^\mu \ell_3\right)$ | C |
| ll_1231 | $\left(\bar{\ell}_1 \gamma_\mu \ell_2\right)\left(\bar{\ell}_3 \gamma^\mu \ell_1\right)$ | C |
| ll_1232 | $\left(\bar{\ell}_1 \gamma_\mu \ell_2\right)\left(\bar{\ell}_3 \gamma^\mu \ell_2\right)$ | C |
| ll_1233 | $\left(\bar{\ell}_1 \gamma_\mu \ell_2\right)\left(\bar{\ell}_3 \gamma^\mu \ell_3\right)$ | C |
| ll_1313 | $\left(\bar{\ell}_1 \gamma_\mu \ell_3\right)\left(\bar{\ell}_1 \gamma^\mu \ell_3\right)$ | C |
| ll_1322 | $\left(\bar{\ell}_1 \gamma_\mu \ell_3\right)\left(\bar{\ell}_2 \gamma^\mu \ell_2\right)$ | C |
| ll_1323 | $\left(\bar{\ell}_1 \gamma_\mu \ell_3\right)\left(\bar{\ell}_2 \gamma^\mu \ell_3\right)$ | C |
| ll_1331 | $\left(\bar{\ell}_1 \gamma_\mu \ell_3\right)\left(\bar{\ell}_3 \gamma^\mu \ell_1\right)$ | R |
| ll_1332 | $\left(\bar{\ell}_1 \gamma_\mu \ell_3\right)\left(\bar{\ell}_3 \gamma^\mu \ell_2\right)$ | C |
| ll_1333 | $\left(\bar{\ell}_1 \gamma_\mu \ell_3\right)\left(\bar{\ell}_3 \gamma^\mu \ell_3\right)$ | C |
| ll_2222 | $\left(\bar{\ell}_2 \gamma_\mu \ell_2\right)\left(\bar{\ell}_2 \gamma^\mu \ell_2\right)$ | R |
| ll_2223 | $\left(\bar{\ell}_2 \gamma_\mu \ell_2\right)\left(\bar{\ell}_2 \gamma^\mu \ell_3\right)$ | C |
| ll_2233 | $\left(\bar{\ell}_2 \gamma_\mu \ell_2\right)\left(\bar{\ell}_3 \gamma^\mu \ell_3\right)$ | R |
| ll_2323 | $\left(\bar{\ell}_2 \gamma_\mu \ell_3\right)\left(\bar{\ell}_2 \gamma^\mu \ell_3\right)$ | C |
| ll_2332 | $\left(\bar{\ell}_2 \gamma_\mu \ell_3\right)\left(\bar{\ell}_3 \gamma^\mu \ell_2\right)$ | R |
| ll_2333 | $\left(\bar{\ell}_2 \gamma_\mu \ell_3\right)\left(\bar{\ell}_3 \gamma^\mu \ell_3\right)$ | C |
| ll_3333 | $\left(\bar{\ell}_3 \gamma_\mu \ell_3\right)\left(\bar{\ell}_3 \gamma^\mu \ell_3\right)$ | R |
| qq1_1111 | $\left(\bar{q}_1 \gamma_\mu q_1\right)\left(\bar{q}_1 \gamma^\mu q_1\right)$ | R |
| qq1_1112 | $\left(\bar{q}_1 \gamma_\mu q_1\right)\left(\bar{q}_1 \gamma^\mu q_2\right)$ | C |
| qq1_1113 | $\left(\bar{q}_1 \gamma_\mu q_1\right)\left(\bar{q}_1 \gamma^\mu q_3\right)$ | C |
| qq1_1122 | $\left(\bar{q}_1 \gamma_\mu q_1\right)\left(\bar{q}_2 \gamma^\mu q_2\right)$ | R |
| qq1_1123 | $\left(\bar{q}_1 \gamma_\mu q_1\right)\left(\bar{q}_2 \gamma^\mu q_3\right)$ | C |
| qq1_1133 | $\left(\bar{q}_1 \gamma_\mu q_1\right)\left(\bar{q}_3 \gamma^\mu q_3\right)$ | R |
| qq1_1212 | $\left(\bar{q}_1 \gamma_\mu q_2\right)\left(\bar{q}_1 \gamma^\mu q_2\right)$ | C |
| qq1_1213 | $\left(\bar{q}_1 \gamma_\mu q_2\right)\left(\bar{q}_1 \gamma^\mu q_3\right)$ | C |
| qq1_1221 | $\left(\bar{q}_1 \gamma_\mu q_2\right)\left(\bar{q}_2 \gamma^\mu q_1\right)$ | R |
| qq1_1222 | $\left(\bar{q}_1 \gamma_\mu q_2\right)\left(\bar{q}_2 \gamma^\mu q_2\right)$ | C |
| qq1_1223 | $\left(\bar{q}_1 \gamma_\mu q_2\right)\left(\bar{q}_2 \gamma^\mu q_3\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| qq1_1231 | $(\bar{q}_1\gamma_\mu q_2)\,(\bar{q}_3\gamma^\mu q_1)$ | C |
| qq1_1232 | $(\bar{q}_1\gamma_\mu q_2)\,(\bar{q}_3\gamma^\mu q_2)$ | C |
| qq1_1233 | $(\bar{q}_1\gamma_\mu q_2)\,(\bar{q}_3\gamma^\mu q_3)$ | C |
| qq1_1313 | $(\bar{q}_1\gamma_\mu q_3)\,(\bar{q}_1\gamma^\mu q_3)$ | C |
| qq1_1322 | $(\bar{q}_1\gamma_\mu q_3)\,(\bar{q}_2\gamma^\mu q_2)$ | C |
| qq1_1323 | $(\bar{q}_1\gamma_\mu q_3)\,(\bar{q}_2\gamma^\mu q_3)$ | C |
| qq1_1331 | $(\bar{q}_1\gamma_\mu q_3)\,(\bar{q}_3\gamma^\mu q_1)$ | R |
| qq1_1332 | $(\bar{q}_1\gamma_\mu q_3)\,(\bar{q}_3\gamma^\mu q_2)$ | C |
| qq1_1333 | $(\bar{q}_1\gamma_\mu q_3)\,(\bar{q}_3\gamma^\mu q_3)$ | C |
| qq1_2222 | $(\bar{q}_2\gamma_\mu q_2)\,(\bar{q}_2\gamma^\mu q_2)$ | R |
| qq1_2223 | $(\bar{q}_2\gamma_\mu q_2)\,(\bar{q}_2\gamma^\mu q_3)$ | C |
| qq1_2233 | $(\bar{q}_2\gamma_\mu q_2)\,(\bar{q}_3\gamma^\mu q_3)$ | R |
| qq1_2323 | $(\bar{q}_2\gamma_\mu q_3)\,(\bar{q}_2\gamma^\mu q_3)$ | C |
| qq1_2332 | $(\bar{q}_2\gamma_\mu q_3)\,(\bar{q}_3\gamma^\mu q_2)$ | R |
| qq1_2333 | $(\bar{q}_2\gamma_\mu q_3)\,(\bar{q}_3\gamma^\mu q_3)$ | C |
| qq1_3333 | $(\bar{q}_3\gamma_\mu q_3)\,(\bar{q}_3\gamma^\mu q_3)$ | R |
| qq3_1111 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | R |
| qq3_1112 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1113 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1122 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| qq3_1123 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1133 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| qq3_1212 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1213 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1221 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_1\right)$ | R |
| qq3_1222 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1223 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1231 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | C |
| qq3_1232 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1233 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1313 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1322 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1323 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1331 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | R |
| qq3_1332 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1333 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_2222 | $\left(\bar{q}_2\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| qq3_2223 | $\left(\bar{q}_2\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_2233 | $\left(\bar{q}_2\gamma_\mu\tau^I q_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| qq3_2323 | $\left(\bar{q}_2\gamma_\mu\tau^I q_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_2332 | $\left(\bar{q}_2\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | R |
| qq3_2333 | $\left(\bar{q}_2\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_3333 | $\left(\bar{q}_3\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| lq1_1111 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)(\bar{q}_1\gamma^\mu q_1)$ | R |

| WC name | Operator | Type |
|---|---|---|
| lq1_1112 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_1113 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_1122 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | R |
| lq1_1123 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_1133 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| lq1_1211 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | C |
| lq1_1212 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_1213 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_1221 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_1\right)$ | C |
| lq1_1222 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | C |
| lq1_1223 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_1231 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_3\gamma^\mu q_1\right)$ | C |
| lq1_1232 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | C |
| lq1_1233 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |
| lq1_1311 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | C |
| lq1_1312 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_1313 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_1321 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_1\right)$ | C |
| lq1_1322 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | C |
| lq1_1323 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_1331 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_1\right)$ | C |
| lq1_1332 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | C |
| lq1_1333 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |
| lq1_2211 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | R |
| lq1_2212 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_2213 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_2222 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | R |
| lq1_2223 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_2233 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| lq1_2311 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | C |
| lq1_2312 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_2313 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_2321 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_1\right)$ | C |
| lq1_2322 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | C |
| lq1_2323 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_2331 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_1\right)$ | C |
| lq1_2332 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | C |
| lq1_2333 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |
| lq1_3311 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | R |
| lq1_3312 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_3313 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_3322 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | R |

| WC name | Operator | Type |
|---|---|---|
| lq1_3323 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| lq3_1111 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | R |
| lq3_1112 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1113 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1122 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| lq3_1123 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1133 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| lq3_1211 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1212 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1213 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1221 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1222 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1223 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1231 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1232 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1233 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1311 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1312 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1313 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1321 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1322 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1323 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1331 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1332 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1333 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2211 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | R |
| lq3_2212 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_2213 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2222 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| lq3_2223 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2233 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| lq3_2311 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_2312 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_2313 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2321 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_2322 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_2323 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2331 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_2332 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_2333 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_3311 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | R |

| WC name | Operator | Type |
|---|---|---|
| lq3_3312 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_3313 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_3322 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| lq3_3323 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_3333 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| ee_1111 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| ee_1112 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| ee_1113 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| ee_1122 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| ee_1123 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_1133 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| ee_1212 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| ee_1213 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| ee_1222 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| ee_1223 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_1232 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| ee_1233 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| ee_1313 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| ee_1323 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_1333 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| ee_2222 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| ee_2223 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_2233 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| ee_2323 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_2333 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| ee_3333 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| uu_1111 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| uu_1112 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| uu_1113 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| uu_1122 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| uu_1123 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_1133 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| uu_1212 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| uu_1213 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| uu_1221 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | R |
| uu_1222 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| uu_1223 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_1231 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| uu_1232 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| uu_1233 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| uu_1313 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| uu_1322 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| uu_1323 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_1331 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | R |

| WC name | Operator | Type |
| --- | --- | --- |
| uu_1332 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| uu_1333 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| uu_2222 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| uu_2223 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_2233 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| uu_2323 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_2332 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | R |
| uu_2333 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| uu_3333 | $\left(\bar{u}_3\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| dd_1111 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| dd_1112 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| dd_1113 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| dd_1122 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| dd_1123 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_1133 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| dd_1212 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| dd_1213 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| dd_1221 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | R |
| dd_1222 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| dd_1223 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_1231 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| dd_1232 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| dd_1233 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| dd_1313 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| dd_1322 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| dd_1323 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_1331 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | R |
| dd_1332 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| dd_1333 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| dd_2222 | $\left(\bar{d}_2\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| dd_2223 | $\left(\bar{d}_2\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_2233 | $\left(\bar{d}_2\gamma_\mu d_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| dd_2323 | $\left(\bar{d}_2\gamma_\mu d_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_2332 | $\left(\bar{d}_2\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | R |
| dd_2333 | $\left(\bar{d}_2\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| dd_3333 | $\left(\bar{d}_3\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| eu_1111 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| eu_1112 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| eu_1113 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| eu_1122 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| eu_1123 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| eu_1133 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| eu_1211 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |

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| WC name | Operator | Type |
|---|---|---|
| eu_1212 | $(\bar{e}_1\gamma_\mu e_2)\,(\bar{u}_1\gamma^\mu u_2)$ | C |
| eu_1213 | $(\bar{e}_1\gamma_\mu e_2)\,(\bar{u}_1\gamma^\mu u_3)$ | C |
| eu_1221 | $(\bar{e}_1\gamma_\mu e_2)\,(\bar{u}_2\gamma^\mu u_1)$ | C |
| eu_1222 | $(\bar{e}_1\gamma_\mu e_2)\,(\bar{u}_2\gamma^\mu u_2)$ | C |
| eu_1223 | $(\bar{e}_1\gamma_\mu e_2)\,(\bar{u}_2\gamma^\mu u_3)$ | C |
| eu_1231 | $(\bar{e}_1\gamma_\mu e_2)\,(\bar{u}_3\gamma^\mu u_1)$ | C |
| eu_1232 | $(\bar{e}_1\gamma_\mu e_2)\,(\bar{u}_3\gamma^\mu u_2)$ | C |
| eu_1233 | $(\bar{e}_1\gamma_\mu e_2)\,(\bar{u}_3\gamma^\mu u_3)$ | C |
| eu_1311 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_1)$ | C |
| eu_1312 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_2)$ | C |
| eu_1313 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_3)$ | C |
| eu_1321 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_2\gamma^\mu u_1)$ | C |
| eu_1322 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_2\gamma^\mu u_2)$ | C |
| eu_1323 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_2\gamma^\mu u_3)$ | C |
| eu_1331 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_3\gamma^\mu u_1)$ | C |
| eu_1332 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_3\gamma^\mu u_2)$ | C |
| eu_1333 | $(\bar{e}_1\gamma_\mu e_3)\,(\bar{u}_3\gamma^\mu u_3)$ | C |
| eu_2211 | $(\bar{e}_2\gamma_\mu e_2)\,(\bar{u}_1\gamma^\mu u_1)$ | R |
| eu_2212 | $(\bar{e}_2\gamma_\mu e_2)\,(\bar{u}_1\gamma^\mu u_2)$ | C |
| eu_2213 | $(\bar{e}_2\gamma_\mu e_2)\,(\bar{u}_1\gamma^\mu u_3)$ | C |
| eu_2222 | $(\bar{e}_2\gamma_\mu e_2)\,(\bar{u}_2\gamma^\mu u_2)$ | R |
| eu_2223 | $(\bar{e}_2\gamma_\mu e_2)\,(\bar{u}_2\gamma^\mu u_3)$ | C |
| eu_2233 | $(\bar{e}_2\gamma_\mu e_2)\,(\bar{u}_3\gamma^\mu u_3)$ | R |
| eu_2311 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_1)$ | C |
| eu_2312 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_2)$ | C |
| eu_2313 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_3)$ | C |
| eu_2321 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_2\gamma^\mu u_1)$ | C |
| eu_2322 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_2\gamma^\mu u_2)$ | C |
| eu_2323 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_2\gamma^\mu u_3)$ | C |
| eu_2331 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_3\gamma^\mu u_1)$ | C |
| eu_2332 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_3\gamma^\mu u_2)$ | C |
| eu_2333 | $(\bar{e}_2\gamma_\mu e_3)\,(\bar{u}_3\gamma^\mu u_3)$ | C |
| eu_3311 | $(\bar{e}_3\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_1)$ | R |
| eu_3312 | $(\bar{e}_3\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_2)$ | C |
| eu_3313 | $(\bar{e}_3\gamma_\mu e_3)\,(\bar{u}_1\gamma^\mu u_3)$ | C |
| eu_3322 | $(\bar{e}_3\gamma_\mu e_3)\,(\bar{u}_2\gamma^\mu u_2)$ | R |
| eu_3323 | $(\bar{e}_3\gamma_\mu e_3)\,(\bar{u}_2\gamma^\mu u_3)$ | C |
| eu_3333 | $(\bar{e}_3\gamma_\mu e_3)\,(\bar{u}_3\gamma^\mu u_3)$ | R |
| ed_1111 | $(\bar{e}_1\gamma_\mu e_1)\,(\bar{d}_1\gamma^\mu d_1)$ | R |
| ed_1112 | $(\bar{e}_1\gamma_\mu e_1)\,(\bar{d}_1\gamma^\mu d_2)$ | C |
| ed_1113 | $(\bar{e}_1\gamma_\mu e_1)\,(\bar{d}_1\gamma^\mu d_3)$ | C |
| ed_1122 | $(\bar{e}_1\gamma_\mu e_1)\,(\bar{d}_2\gamma^\mu d_2)$ | R |
| ed_1123 | $(\bar{e}_1\gamma_\mu e_1)\,(\bar{d}_2\gamma^\mu d_3)$ | C |
| ed_1133 | $(\bar{e}_1\gamma_\mu e_1)\,(\bar{d}_3\gamma^\mu d_3)$ | R |

| WC name | Operator | Type |
|---|---|---|
| ed_1211 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ed_1212 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_1213 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_1221 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ed_1222 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ed_1223 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_1231 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ed_1232 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ed_1233 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ed_1311 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ed_1312 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_1313 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_1321 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ed_1322 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ed_1323 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_1331 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ed_1332 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ed_1333 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ed_2211 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ed_2212 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_2213 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_2222 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ed_2223 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_2233 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ed_2311 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ed_2312 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_2313 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_2321 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ed_2322 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ed_2323 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_2331 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ed_2332 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ed_2333 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ed_3311 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ed_3312 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_3313 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_3322 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ed_3323 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_3333 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ud1_1111 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ud1_1112 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_1113 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| ud1_1122 | $(\bar{u}_1\gamma_\mu u_1)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ud1_1123 | $(\bar{u}_1\gamma_\mu u_1)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_1133 | $(\bar{u}_1\gamma_\mu u_1)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ud1_1211 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ud1_1212 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_1213 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_1221 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ud1_1222 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ud1_1223 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_1231 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ud1_1232 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ud1_1233 | $(\bar{u}_1\gamma_\mu u_2)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ud1_1311 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ud1_1312 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_1313 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_1321 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ud1_1322 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ud1_1323 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_1331 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ud1_1332 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ud1_1333 | $(\bar{u}_1\gamma_\mu u_3)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ud1_2211 | $(\bar{u}_2\gamma_\mu u_2)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ud1_2212 | $(\bar{u}_2\gamma_\mu u_2)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_2213 | $(\bar{u}_2\gamma_\mu u_2)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_2222 | $(\bar{u}_2\gamma_\mu u_2)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ud1_2223 | $(\bar{u}_2\gamma_\mu u_2)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_2233 | $(\bar{u}_2\gamma_\mu u_2)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ud1_2311 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ud1_2312 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_2313 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_2321 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ud1_2322 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ud1_2323 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_2331 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ud1_2332 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ud1_2333 | $(\bar{u}_2\gamma_\mu u_3)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ud1_3311 | $(\bar{u}_3\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ud1_3312 | $(\bar{u}_3\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_3313 | $(\bar{u}_3\gamma_\mu u_3)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_3322 | $(\bar{u}_3\gamma_\mu u_3)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ud1_3323 | $(\bar{u}_3\gamma_\mu u_3)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_3333 | $(\bar{u}_3\gamma_\mu u_3)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |

| WC name | Operator | Type |
|---|---|---|
| ud8_1111 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| ud8_1112 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_1113 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_1122 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| ud8_1123 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_1133 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| ud8_1211 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| ud8_1212 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_1213 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_1221 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| ud8_1222 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| ud8_1223 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_1231 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| ud8_1232 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| ud8_1233 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| ud8_1311 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| ud8_1312 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_1313 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_1321 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| ud8_1322 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| ud8_1323 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_1331 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| ud8_1332 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| ud8_1333 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| ud8_2211 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| ud8_2212 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_2213 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_2222 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| ud8_2223 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_2233 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| ud8_2311 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| ud8_2312 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_2313 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_2321 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| ud8_2322 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| ud8_2323 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_2331 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| ud8_2332 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| ud8_2333 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| ud8_3311 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| ud8_3312 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_3313 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| ud8_3322 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| ud8_3323 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_3333 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| le_1111 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| le_1112 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_1113 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_1122 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| le_1123 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_1133 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| le_1211 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| le_1212 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_1213 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_1221 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| le_1222 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| le_1223 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_1231 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| le_1232 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| le_1233 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| le_1311 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| le_1312 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_1313 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_1321 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| le_1322 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| le_1323 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_1331 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| le_1332 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| le_1333 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| le_2211 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| le_2212 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_2213 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_2222 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| le_2223 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_2233 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| le_2311 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| le_2312 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_2313 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_2321 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| le_2322 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| le_2323 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_2331 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| le_2332 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| le_2333 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| le_3311 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| le_3312 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_3313 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_3322 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| le_3323 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| lu_1111 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| lu_1112 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_1113 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_1122 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| lu_1123 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_1133 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| lu_1211 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| lu_1212 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_1213 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_1221 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| lu_1222 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| lu_1223 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_1231 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| lu_1232 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| lu_1233 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| lu_1311 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| lu_1312 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_1313 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_1321 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| lu_1322 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| lu_1323 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_1331 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| lu_1332 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| lu_1333 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| lu_2211 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| lu_2212 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_2213 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_2222 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| lu_2223 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_2233 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| lu_2311 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| lu_2312 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_2313 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_2321 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| lu_2322 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| lu_2323 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| lu_2331 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| lu_2332 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| lu_2333 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| lu_3311 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| lu_3312 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_3313 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_3322 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| lu_3323 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| ld_1111 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ld_1112 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_1113 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_1122 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ld_1123 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_1133 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ld_1211 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ld_1212 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_1213 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_1221 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ld_1222 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ld_1223 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_1231 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ld_1232 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ld_1233 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ld_1311 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ld_1312 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_1313 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_1321 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ld_1322 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ld_1323 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_1331 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ld_1332 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ld_1333 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ld_2211 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ld_2212 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_2213 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_2222 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ld_2223 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_2233 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ld_2311 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ld_2312 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_2313 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| ld_2321 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ld_2322 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ld_2323 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_2331 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ld_2332 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ld_2333 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ld_3311 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ld_3312 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_3313 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_3322 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ld_3323 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| qe_1111 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| qe_1112 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| qe_1113 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| qe_1122 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| qe_1123 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| qe_1133 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| qe_1211 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| qe_1212 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| qe_1213 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| qe_1221 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| qe_1222 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| qe_1223 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| qe_1231 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| qe_1232 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| qe_1233 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| qe_1311 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| qe_1312 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| qe_1313 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| qe_1321 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| qe_1322 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| qe_1323 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| qe_1331 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| qe_1332 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| qe_1333 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| qe_2211 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| qe_2212 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| qe_2213 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| qe_2222 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| qe_2223 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| qe_2233 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| qe_2311 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| qe_2312 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_2)$ | C |
| qe_2313 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_3)$ | C |
| qe_2321 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_1)$ | C |
| qe_2322 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_2)$ | C |
| qe_2323 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_3)$ | C |
| qe_2331 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_1)$ | C |
| qe_2332 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_2)$ | C |
| qe_2333 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_3)$ | C |
| qe_3311 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_1)$ | R |
| qe_3312 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_2)$ | C |
| qe_3313 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_3)$ | C |
| qe_3322 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_2)$ | R |
| qe_3323 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_3)$ | C |
| qe_3333 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_3)$ | R |
| qu1_1111 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_1 \gamma^\mu u_1)$ | R |
| qu1_1112 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_1 \gamma^\mu u_2)$ | C |
| qu1_1113 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_1 \gamma^\mu u_3)$ | C |
| qu1_1122 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_2 \gamma^\mu u_2)$ | R |
| qu1_1123 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_2 \gamma^\mu u_3)$ | C |
| qu1_1133 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_3 \gamma^\mu u_3)$ | R |
| qu1_1211 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_1)$ | C |
| qu1_1212 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_2)$ | C |
| qu1_1213 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_3)$ | C |
| qu1_1221 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_1)$ | C |
| qu1_1222 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_2)$ | C |
| qu1_1223 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_3)$ | C |
| qu1_1231 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_3 \gamma^\mu u_1)$ | C |
| qu1_1232 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_3 \gamma^\mu u_2)$ | C |
| qu1_1233 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_3 \gamma^\mu u_3)$ | C |
| qu1_1311 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_1)$ | C |
| qu1_1312 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_2)$ | C |
| qu1_1313 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_3)$ | C |
| qu1_1321 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_1)$ | C |
| qu1_1322 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_2)$ | C |
| qu1_1323 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_3)$ | C |
| qu1_1331 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_1)$ | C |
| qu1_1332 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_2)$ | C |
| qu1_1333 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_3)$ | C |
| qu1_2211 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_1)$ | R |
| qu1_2212 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_2)$ | C |
| qu1_2213 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_3)$ | C |
| qu1_2222 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_2)$ | R |
| qu1_2223 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_3)$ | C |
| qu1_2233 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_3 \gamma^\mu u_3)$ | R |

| WC name | Operator | Type |
|---|---|---|
| qu1_2311 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| qu1_2312 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| qu1_2313 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| qu1_2321 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| qu1_2322 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| qu1_2323 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| qu1_2331 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| qu1_2332 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| qu1_2333 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| qu1_3311 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| qu1_3312 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| qu1_3313 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| qu1_3322 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| qu1_3323 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| qu1_3333 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| qd1_1111 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| qd1_1112 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_1113 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_1122 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| qd1_1123 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_1133 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| qd1_1211 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| qd1_1212 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_1213 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_1221 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| qd1_1222 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| qd1_1223 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_1231 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| qd1_1232 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| qd1_1233 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| qd1_1311 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| qd1_1312 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_1313 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_1321 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| qd1_1322 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| qd1_1323 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_1331 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| qd1_1332 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| qd1_1333 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| qd1_2211 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| qd1_2212 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_2213 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_2222 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |

| WC name | Operator | Type |
|---------|----------|------|
| qd1_2223 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_2233 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| qd1_2311 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| qd1_2312 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_2313 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_2321 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| qd1_2322 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| qd1_2323 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_2331 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| qd1_2332 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| qd1_2333 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| qd1_3311 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| qd1_3312 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_3313 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_3322 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| qd1_3323 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_3333 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| qu8_1111 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | R |
| qu8_1112 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_1113 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_1122 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | R |
| qu8_1123 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_1133 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | R |
| qu8_1211 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | C |
| qu8_1212 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_1213 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_1221 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_1\right)$ | C |
| qu8_1222 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | C |
| qu8_1223 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_1231 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_3\gamma^\mu T^A u_1\right)$ | C |
| qu8_1232 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_3\gamma^\mu T^A u_2\right)$ | C |
| qu8_1233 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | C |
| qu8_1311 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | C |
| qu8_1312 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_1313 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_1321 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_1\right)$ | C |
| qu8_1322 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | C |
| qu8_1323 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_1331 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_1\right)$ | C |
| qu8_1332 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_2\right)$ | C |
| qu8_1333 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | C |
| qu8_2211 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | R |
| qu8_2212 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| qu8_2213 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_2222 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | R |
| qu8_2223 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_2233 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | R |
| qu8_2311 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | C |
| qu8_2312 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_2313 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_2321 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_1\right)$ | C |
| qu8_2322 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | C |
| qu8_2323 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_2331 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_1\right)$ | C |
| qu8_2332 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_2\right)$ | C |
| qu8_2333 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | C |
| qu8_3311 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | R |
| qu8_3312 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_3313 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_3322 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | R |
| qu8_3323 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_3333 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | R |
| qd8_1111 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| qd8_1112 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_1113 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_1122 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| qd8_1123 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_1133 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| qd8_1211 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| qd8_1212 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_1213 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_1221 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| qd8_1222 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| qd8_1223 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_1231 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| qd8_1232 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| qd8_1233 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| qd8_1311 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| qd8_1312 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_1313 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_1321 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| qd8_1322 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| qd8_1323 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_1331 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| qd8_1332 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| qd8_1333 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| qd8_2211 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| qd8_2212 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_2213 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_2222 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| qd8_2223 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_2233 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| qd8_2311 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| qd8_2312 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_2313 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_2321 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| qd8_2322 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| qd8_2323 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_2331 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| qd8_2332 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| qd8_2333 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| qd8_3311 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| qd8_3312 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_3313 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_3322 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| qd8_3323 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_3333 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| ledq_1111 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_1112 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_1113 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_1121 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_1122 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_1123 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_1131 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_1132 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_1133 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_1211 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_1212 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_1213 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_1221 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_1222 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_1223 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_1231 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_1232 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_1233 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_1311 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_1312 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_1313 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_1 q_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| ledq_1321 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_1322 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_1323 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_1331 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_1332 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_1333 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_2111 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_2112 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_2113 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_2121 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_2122 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_2123 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_2131 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_2132 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_2133 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_2211 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_2212 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_2213 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_2221 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_2222 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_2223 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_2231 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_2232 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_2233 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_2311 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_2312 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_2313 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_2321 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_2322 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_2323 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_2331 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_2332 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_2333 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_3111 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_3112 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_3113 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_3121 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_3122 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_3123 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_3131 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_3132 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_3133 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_3 q_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| ledq_3211 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_3212 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_3213 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_3221 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_3222 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_3223 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_3231 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_3232 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_3233 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_3311 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_3312 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_3313 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_3321 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_3322 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_3323 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_3331 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_3332 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_3333 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_3 q_3\right)$ | C |
| quqd1_1111 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_1 d_1\right)$ | C |
| quqd1_1112 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_1 d_2\right)$ | C |
| quqd1_1113 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_1 d_3\right)$ | C |
| quqd1_1121 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_2 d_1\right)$ | C |
| quqd1_1122 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_2 d_2\right)$ | C |
| quqd1_1123 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_2 d_3\right)$ | C |
| quqd1_1131 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_3 d_1\right)$ | C |
| quqd1_1132 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_3 d_2\right)$ | C |
| quqd1_1133 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_3 d_3\right)$ | C |
| quqd1_1211 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_1 d_1\right)$ | C |
| quqd1_1212 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_1 d_2\right)$ | C |
| quqd1_1213 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_1 d_3\right)$ | C |
| quqd1_1221 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_2 d_1\right)$ | C |
| quqd1_1222 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_2 d_2\right)$ | C |
| quqd1_1223 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_2 d_3\right)$ | C |
| quqd1_1231 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_3 d_1\right)$ | C |
| quqd1_1232 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_3 d_2\right)$ | C |
| quqd1_1233 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_3 d_3\right)$ | C |
| quqd1_1311 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_1 d_1\right)$ | C |
| quqd1_1312 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_1 d_2\right)$ | C |
| quqd1_1313 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_1 d_3\right)$ | C |
| quqd1_1321 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_2 d_1\right)$ | C |
| quqd1_1322 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_2 d_2\right)$ | C |
| quqd1_1323 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_2 d_3\right)$ | C |
| quqd1_1331 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_3 d_1\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| quqd1_1332 | $(\bar{q}_1 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_1333 | $(\bar{q}_1 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd1_2111 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_1 d_1)$ | C |
| quqd1_2112 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_1 d_2)$ | C |
| quqd1_2113 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_1 d_3)$ | C |
| quqd1_2121 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_2 d_1)$ | C |
| quqd1_2122 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_2 d_2)$ | C |
| quqd1_2123 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_2 d_3)$ | C |
| quqd1_2131 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_3 d_1)$ | C |
| quqd1_2132 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_2133 | $(\bar{q}_2 u_1)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd1_2211 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_1 d_1)$ | C |
| quqd1_2212 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_1 d_2)$ | C |
| quqd1_2213 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_1 d_3)$ | C |
| quqd1_2221 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_1)$ | C |
| quqd1_2222 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_2)$ | C |
| quqd1_2223 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_3)$ | C |
| quqd1_2231 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_1)$ | C |
| quqd1_2232 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_2233 | $(\bar{q}_2 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd1_2311 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_1)$ | C |
| quqd1_2312 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_2)$ | C |
| quqd1_2313 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_3)$ | C |
| quqd1_2321 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_1)$ | C |
| quqd1_2322 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_2)$ | C |
| quqd1_2323 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_3)$ | C |
| quqd1_2331 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_1)$ | C |
| quqd1_2332 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_2333 | $(\bar{q}_2 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd1_3111 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_1 d_1)$ | C |
| quqd1_3112 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_1 d_2)$ | C |
| quqd1_3113 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_1 d_3)$ | C |
| quqd1_3121 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_2 d_1)$ | C |
| quqd1_3122 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_2 d_2)$ | C |
| quqd1_3123 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_2 d_3)$ | C |
| quqd1_3131 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_3 d_1)$ | C |
| quqd1_3132 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_3133 | $(\bar{q}_3 u_1)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd1_3211 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_1 d_1)$ | C |
| quqd1_3212 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_1 d_2)$ | C |
| quqd1_3213 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_1 d_3)$ | C |
| quqd1_3221 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_1)$ | C |
| quqd1_3222 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_2)$ | C |
| quqd1_3223 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_3)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| quqd1_3231 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_1)$ | C |
| quqd1_3232 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_3233 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd1_3311 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_1)$ | C |
| quqd1_3312 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_2)$ | C |
| quqd1_3313 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_3)$ | C |
| quqd1_3321 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_1)$ | C |
| quqd1_3322 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_2)$ | C |
| quqd1_3323 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_3)$ | C |
| quqd1_3331 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_1)$ | C |
| quqd1_3332 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_3333 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd8_1111 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_1)$ | C |
| quqd8_1112 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_2)$ | C |
| quqd8_1113 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_3)$ | C |
| quqd8_1121 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_1)$ | C |
| quqd8_1122 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_2)$ | C |
| quqd8_1123 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_3)$ | C |
| quqd8_1131 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_1)$ | C |
| quqd8_1132 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_2)$ | C |
| quqd8_1133 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_3)$ | C |
| quqd8_1211 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_1)$ | C |
| quqd8_1212 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_2)$ | C |
| quqd8_1213 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_3)$ | C |
| quqd8_1221 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_1)$ | C |
| quqd8_1222 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_2)$ | C |
| quqd8_1223 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_3)$ | C |
| quqd8_1231 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_1)$ | C |
| quqd8_1232 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_2)$ | C |
| quqd8_1233 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_3)$ | C |
| quqd8_1311 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_1)$ | C |
| quqd8_1312 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_2)$ | C |
| quqd8_1313 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_3)$ | C |
| quqd8_1321 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_1)$ | C |
| quqd8_1322 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_2)$ | C |
| quqd8_1323 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_3)$ | C |
| quqd8_1331 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_1)$ | C |
| quqd8_1332 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_2)$ | C |
| quqd8_1333 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_3)$ | C |
| quqd8_2111 | $(\bar{q}_2 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_1)$ | C |
| quqd8_2112 | $(\bar{q}_2 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_2)$ | C |
| quqd8_2113 | $(\bar{q}_2 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_3)$ | C |
| quqd8_2121 | $(\bar{q}_2 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_1)$ | C |
| quqd8_2122 | $(\bar{q}_2 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_2)$ | C |

| WC name | Operator | Type |
|---|---|---|
| quqd8_2123 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_2131 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_2132 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_2133 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_2211 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_2212 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_2213 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_2221 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_2222 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_2223 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_2231 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_2232 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_2233 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_2311 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_2312 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_2313 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_2321 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_2322 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_2323 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_2331 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_2332 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_2333 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_3111 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_3112 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_3113 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_3121 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_3122 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_3123 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_3131 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_3132 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_3133 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_3211 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_3212 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_3213 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_3221 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_3222 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_3223 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_3231 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_3232 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_3233 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_3311 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_3312 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_3313 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_3321 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| quqd8_3322 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_3323 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_3331 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_3332 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_3333 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| lequ1_1111 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_1112 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_1113 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_1121 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_1122 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_1123 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_1131 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_1132 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_1133 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_1211 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_1212 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_1213 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_1221 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_1222 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_1223 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_1231 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_1232 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_1233 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_1311 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_1312 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_1313 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_1321 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_1322 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_1323 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_1331 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_1332 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_1333 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_2111 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_2112 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_2113 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_2121 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_2122 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_2123 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_2131 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_2132 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_2133 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_2211 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| lequ1_2212 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_2213 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_2221 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_2222 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_2223 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_2231 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_2232 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_2233 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_2311 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_2312 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_2313 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_2321 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_2322 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_2323 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_2331 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_2332 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_2333 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_3111 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_3112 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_3113 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_3121 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_3122 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_3123 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_3131 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_3132 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_3133 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_3211 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_3212 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_3213 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_3221 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_3222 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_3223 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_3231 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_3232 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_3233 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_3311 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_3312 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_3313 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_3321 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_3322 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_3323 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_3331 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| lequ1_3332 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_3333 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ3_1111 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1112 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1113 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1121 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1122 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1123 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1131 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1132 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1133 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1211 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1212 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1213 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1221 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1222 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1223 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1231 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1232 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1233 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1311 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1312 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1313 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1321 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1322 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1323 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1331 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1332 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1333 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_2111 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_2112 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_2113 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_2121 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_2122 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_2123 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_2131 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_2132 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_2133 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_2211 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_2212 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_2213 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_2221 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| lequ3_2222 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2223 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2231 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2232 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2233 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2311 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2312 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2313 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2321 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2322 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2323 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2331 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2332 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2333 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3111 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3112 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3113 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3121 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3122 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3123 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3131 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3132 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3133 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3211 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3212 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3213 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3221 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3222 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3223 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3231 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3232 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3233 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3311 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3312 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3313 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3321 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3322 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3323 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3331 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3332 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3333 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |

`dB=dL=1`

| WC name | Operator | Type |
|---|---|---|
| `duql_1111` | $(d_1 C u_1)(q_1 C \ell_1)$ | C |
| `duql_1112` | $(d_1 C u_1)(q_1 C \ell_2)$ | C |
| `duql_1113` | $(d_1 C u_1)(q_1 C \ell_3)$ | C |
| `duql_1121` | $(d_1 C u_1)(q_2 C \ell_1)$ | C |
| `duql_1122` | $(d_1 C u_1)(q_2 C \ell_2)$ | C |
| `duql_1123` | $(d_1 C u_1)(q_2 C \ell_3)$ | C |
| `duql_1131` | $(d_1 C u_1)(q_3 C \ell_1)$ | C |
| `duql_1132` | $(d_1 C u_1)(q_3 C \ell_2)$ | C |
| `duql_1133` | $(d_1 C u_1)(q_3 C \ell_3)$ | C |
| `duql_1211` | $(d_1 C u_2)(q_1 C \ell_1)$ | C |
| `duql_1212` | $(d_1 C u_2)(q_1 C \ell_2)$ | C |
| `duql_1213` | $(d_1 C u_2)(q_1 C \ell_3)$ | C |
| `duql_1221` | $(d_1 C u_2)(q_2 C \ell_1)$ | C |
| `duql_1222` | $(d_1 C u_2)(q_2 C \ell_2)$ | C |
| `duql_1223` | $(d_1 C u_2)(q_2 C \ell_3)$ | C |
| `duql_1231` | $(d_1 C u_2)(q_3 C \ell_1)$ | C |
| `duql_1232` | $(d_1 C u_2)(q_3 C \ell_2)$ | C |
| `duql_1233` | $(d_1 C u_2)(q_3 C \ell_3)$ | C |
| `duql_1311` | $(d_1 C u_3)(q_1 C \ell_1)$ | C |
| `duql_1312` | $(d_1 C u_3)(q_1 C \ell_2)$ | C |
| `duql_1313` | $(d_1 C u_3)(q_1 C \ell_3)$ | C |
| `duql_1321` | $(d_1 C u_3)(q_2 C \ell_1)$ | C |
| `duql_1322` | $(d_1 C u_3)(q_2 C \ell_2)$ | C |
| `duql_1323` | $(d_1 C u_3)(q_2 C \ell_3)$ | C |
| `duql_1331` | $(d_1 C u_3)(q_3 C \ell_1)$ | C |
| `duql_1332` | $(d_1 C u_3)(q_3 C \ell_2)$ | C |
| `duql_1333` | $(d_1 C u_3)(q_3 C \ell_3)$ | C |
| `duql_2111` | $(d_2 C u_1)(q_1 C \ell_1)$ | C |
| `duql_2112` | $(d_2 C u_1)(q_1 C \ell_2)$ | C |
| `duql_2113` | $(d_2 C u_1)(q_1 C \ell_3)$ | C |
| `duql_2121` | $(d_2 C u_1)(q_2 C \ell_1)$ | C |
| `duql_2122` | $(d_2 C u_1)(q_2 C \ell_2)$ | C |
| `duql_2123` | $(d_2 C u_1)(q_2 C \ell_3)$ | C |
| `duql_2131` | $(d_2 C u_1)(q_3 C \ell_1)$ | C |
| `duql_2132` | $(d_2 C u_1)(q_3 C \ell_2)$ | C |
| `duql_2133` | $(d_2 C u_1)(q_3 C \ell_3)$ | C |
| `duql_2211` | $(d_2 C u_2)(q_1 C \ell_1)$ | C |
| `duql_2212` | $(d_2 C u_2)(q_1 C \ell_2)$ | C |
| `duql_2213` | $(d_2 C u_2)(q_1 C \ell_3)$ | C |
| `duql_2221` | $(d_2 C u_2)(q_2 C \ell_1)$ | C |
| `duql_2222` | $(d_2 C u_2)(q_2 C \ell_2)$ | C |
| `duql_2223` | $(d_2 C u_2)(q_2 C \ell_3)$ | C |

| WC name | Operator | Type |
|---|---|---|
| duql_2231 | $(d_2 C u_2)(q_3 C \ell_1)$ | C |
| duql_2232 | $(d_2 C u_2)(q_3 C \ell_2)$ | C |
| duql_2233 | $(d_2 C u_2)(q_3 C \ell_3)$ | C |
| duql_2311 | $(d_2 C u_3)(q_1 C \ell_1)$ | C |
| duql_2312 | $(d_2 C u_3)(q_1 C \ell_2)$ | C |
| duql_2313 | $(d_2 C u_3)(q_1 C \ell_3)$ | C |
| duql_2321 | $(d_2 C u_3)(q_2 C \ell_1)$ | C |
| duql_2322 | $(d_2 C u_3)(q_2 C \ell_2)$ | C |
| duql_2323 | $(d_2 C u_3)(q_2 C \ell_3)$ | C |
| duql_2331 | $(d_2 C u_3)(q_3 C \ell_1)$ | C |
| duql_2332 | $(d_2 C u_3)(q_3 C \ell_2)$ | C |
| duql_2333 | $(d_2 C u_3)(q_3 C \ell_3)$ | C |
| duql_3111 | $(d_3 C u_1)(q_1 C \ell_1)$ | C |
| duql_3112 | $(d_3 C u_1)(q_1 C \ell_2)$ | C |
| duql_3113 | $(d_3 C u_1)(q_1 C \ell_3)$ | C |
| duql_3121 | $(d_3 C u_1)(q_2 C \ell_1)$ | C |
| duql_3122 | $(d_3 C u_1)(q_2 C \ell_2)$ | C |
| duql_3123 | $(d_3 C u_1)(q_2 C \ell_3)$ | C |
| duql_3131 | $(d_3 C u_1)(q_3 C \ell_1)$ | C |
| duql_3132 | $(d_3 C u_1)(q_3 C \ell_2)$ | C |
| duql_3133 | $(d_3 C u_1)(q_3 C \ell_3)$ | C |
| duql_3211 | $(d_3 C u_2)(q_1 C \ell_1)$ | C |
| duql_3212 | $(d_3 C u_2)(q_1 C \ell_2)$ | C |
| duql_3213 | $(d_3 C u_2)(q_1 C \ell_3)$ | C |
| duql_3221 | $(d_3 C u_2)(q_2 C \ell_1)$ | C |
| duql_3222 | $(d_3 C u_2)(q_2 C \ell_2)$ | C |
| duql_3223 | $(d_3 C u_2)(q_2 C \ell_3)$ | C |
| duql_3231 | $(d_3 C u_2)(q_3 C \ell_1)$ | C |
| duql_3232 | $(d_3 C u_2)(q_3 C \ell_2)$ | C |
| duql_3233 | $(d_3 C u_2)(q_3 C \ell_3)$ | C |
| duql_3311 | $(d_3 C u_3)(q_1 C \ell_1)$ | C |
| duql_3312 | $(d_3 C u_3)(q_1 C \ell_2)$ | C |
| duql_3313 | $(d_3 C u_3)(q_1 C \ell_3)$ | C |
| duql_3321 | $(d_3 C u_3)(q_2 C \ell_1)$ | C |
| duql_3322 | $(d_3 C u_3)(q_2 C \ell_2)$ | C |
| duql_3323 | $(d_3 C u_3)(q_2 C \ell_3)$ | C |
| duql_3331 | $(d_3 C u_3)(q_3 C \ell_1)$ | C |
| duql_3332 | $(d_3 C u_3)(q_3 C \ell_2)$ | C |
| duql_3333 | $(d_3 C u_3)(q_3 C \ell_3)$ | C |
| qque_1111 | $(q_1 C q_1)(u_1 C e_1)$ | C |
| qque_1112 | $(q_1 C q_1)(u_1 C e_2)$ | C |
| qque_1113 | $(q_1 C q_1)(u_1 C e_3)$ | C |
| qque_1121 | $(q_1 C q_1)(u_2 C e_1)$ | C |
| qque_1122 | $(q_1 C q_1)(u_2 C e_2)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| qque_1123 | $(q_1 C q_1)(u_2 C e_3)$ | C |
| qque_1131 | $(q_1 C q_1)(u_3 C e_1)$ | C |
| qque_1132 | $(q_1 C q_1)(u_3 C e_2)$ | C |
| qque_1133 | $(q_1 C q_1)(u_3 C e_3)$ | C |
| qque_1211 | $(q_1 C q_2)(u_1 C e_1)$ | C |
| qque_1212 | $(q_1 C q_2)(u_1 C e_2)$ | C |
| qque_1213 | $(q_1 C q_2)(u_1 C e_3)$ | C |
| qque_1221 | $(q_1 C q_2)(u_2 C e_1)$ | C |
| qque_1222 | $(q_1 C q_2)(u_2 C e_2)$ | C |
| qque_1223 | $(q_1 C q_2)(u_2 C e_3)$ | C |
| qque_1231 | $(q_1 C q_2)(u_3 C e_1)$ | C |
| qque_1232 | $(q_1 C q_2)(u_3 C e_2)$ | C |
| qque_1233 | $(q_1 C q_2)(u_3 C e_3)$ | C |
| qque_1311 | $(q_1 C q_3)(u_1 C e_1)$ | C |
| qque_1312 | $(q_1 C q_3)(u_1 C e_2)$ | C |
| qque_1313 | $(q_1 C q_3)(u_1 C e_3)$ | C |
| qque_1321 | $(q_1 C q_3)(u_2 C e_1)$ | C |
| qque_1322 | $(q_1 C q_3)(u_2 C e_2)$ | C |
| qque_1323 | $(q_1 C q_3)(u_2 C e_3)$ | C |
| qque_1331 | $(q_1 C q_3)(u_3 C e_1)$ | C |
| qque_1332 | $(q_1 C q_3)(u_3 C e_2)$ | C |
| qque_1333 | $(q_1 C q_3)(u_3 C e_3)$ | C |
| qque_2211 | $(q_2 C q_2)(u_1 C e_1)$ | C |
| qque_2212 | $(q_2 C q_2)(u_1 C e_2)$ | C |
| qque_2213 | $(q_2 C q_2)(u_1 C e_3)$ | C |
| qque_2221 | $(q_2 C q_2)(u_2 C e_1)$ | C |
| qque_2222 | $(q_2 C q_2)(u_2 C e_2)$ | C |
| qque_2223 | $(q_2 C q_2)(u_2 C e_3)$ | C |
| qque_2231 | $(q_2 C q_2)(u_3 C e_1)$ | C |
| qque_2232 | $(q_2 C q_2)(u_3 C e_2)$ | C |
| qque_2233 | $(q_2 C q_2)(u_3 C e_3)$ | C |
| qque_2311 | $(q_2 C q_3)(u_1 C e_1)$ | C |
| qque_2312 | $(q_2 C q_3)(u_1 C e_2)$ | C |
| qque_2313 | $(q_2 C q_3)(u_1 C e_3)$ | C |
| qque_2321 | $(q_2 C q_3)(u_2 C e_1)$ | C |
| qque_2322 | $(q_2 C q_3)(u_2 C e_2)$ | C |
| qque_2323 | $(q_2 C q_3)(u_2 C e_3)$ | C |
| qque_2331 | $(q_2 C q_3)(u_3 C e_1)$ | C |
| qque_2332 | $(q_2 C q_3)(u_3 C e_2)$ | C |
| qque_2333 | $(q_2 C q_3)(u_3 C e_3)$ | C |
| qque_3311 | $(q_3 C q_3)(u_1 C e_1)$ | C |
| qque_3312 | $(q_3 C q_3)(u_1 C e_2)$ | C |
| qque_3313 | $(q_3 C q_3)(u_1 C e_3)$ | C |
| qque_3321 | $(q_3 C q_3)(u_2 C e_1)$ | C |

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| WC name | Operator | Type |
| --- | --- | --- |
| qque_3322 | $(q_3 C q_3)(u_2 C e_2)$ | C |
| qque_3323 | $(q_3 C q_3)(u_2 C e_3)$ | C |
| qque_3331 | $(q_3 C q_3)(u_3 C e_1)$ | C |
| qque_3332 | $(q_3 C q_3)(u_3 C e_2)$ | C |
| qque_3333 | $(q_3 C q_3)(u_3 C e_3)$ | C |
| qqql_1111 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_1 C \ell_1)$ | C |
| qqql_1112 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_1 C \ell_2)$ | C |
| qqql_1113 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_1 C \ell_3)$ | C |
| qqql_1121 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_2 C \ell_1)$ | C |
| qqql_1122 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_2 C \ell_2)$ | C |
| qqql_1123 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_2 C \ell_3)$ | C |
| qqql_1131 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_3 C \ell_1)$ | C |
| qqql_1132 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_3 C \ell_2)$ | C |
| qqql_1133 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_3 C \ell_3)$ | C |
| qqql_1211 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_1 C \ell_1)$ | C |
| qqql_1212 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_1 C \ell_2)$ | C |
| qqql_1213 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_1 C \ell_3)$ | C |
| qqql_1221 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_2 C \ell_1)$ | C |
| qqql_1222 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_2 C \ell_2)$ | C |
| qqql_1223 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_2 C \ell_3)$ | C |
| qqql_1231 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_3 C \ell_1)$ | C |
| qqql_1232 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_3 C \ell_2)$ | C |
| qqql_1233 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_3 C \ell_3)$ | C |
| qqql_1311 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_1 C \ell_1)$ | C |
| qqql_1312 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_1 C \ell_2)$ | C |
| qqql_1313 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_1 C \ell_3)$ | C |
| qqql_1321 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_2 C \ell_1)$ | C |
| qqql_1322 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_2 C \ell_2)$ | C |
| qqql_1323 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_2 C \ell_3)$ | C |
| qqql_1331 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_3 C \ell_1)$ | C |
| qqql_1332 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_3 C \ell_2)$ | C |
| qqql_1333 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_3 C \ell_3)$ | C |
| qqql_2121 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_2 C \ell_1)$ | C |
| qqql_2122 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_2 C \ell_2)$ | C |
| qqql_2123 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_2 C \ell_3)$ | C |
| qqql_2131 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_3 C \ell_1)$ | C |
| qqql_2132 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_3 C \ell_2)$ | C |
| qqql_2133 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_3 C \ell_3)$ | C |
| qqql_2221 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_2)(q_2 C \ell_1)$ | C |
| qqql_2222 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_2)(q_2 C \ell_2)$ | C |
| qqql_2223 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_2)(q_2 C \ell_3)$ | C |
| qqql_2231 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_2)(q_3 C \ell_1)$ | C |
| qqql_2232 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_2)(q_3 C \ell_2)$ | C |
| qqql_2233 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_2)(q_3 C \ell_3)$ | C |

| WC name | Operator | Type |
|---|---|---|
| qqql_2311 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_1 C \ell_1)$ | C |
| qqql_2312 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_1 C \ell_2)$ | C |
| qqql_2313 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_1 C \ell_3)$ | C |
| qqql_2321 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_2 C \ell_1)$ | C |
| qqql_2322 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_2 C \ell_2)$ | C |
| qqql_2323 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_2 C \ell_3)$ | C |
| qqql_2331 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_3 C \ell_1)$ | C |
| qqql_2332 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_3 C \ell_2)$ | C |
| qqql_2333 | $\epsilon_{il}\epsilon_{jk}\,(q_2 C q_3)\,(q_3 C \ell_3)$ | C |
| qqql_3131 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_1)\,(q_3 C \ell_1)$ | C |
| qqql_3132 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_1)\,(q_3 C \ell_2)$ | C |
| qqql_3133 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_1)\,(q_3 C \ell_3)$ | C |
| qqql_3231 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_2)\,(q_3 C \ell_1)$ | C |
| qqql_3232 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_2)\,(q_3 C \ell_2)$ | C |
| qqql_3233 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_2)\,(q_3 C \ell_3)$ | C |
| qqql_3331 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_3)\,(q_3 C \ell_1)$ | C |
| qqql_3332 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_3)\,(q_3 C \ell_2)$ | C |
| qqql_3333 | $\epsilon_{il}\epsilon_{jk}\,(q_3 C q_3)\,(q_3 C \ell_3)$ | C |
| duue_1111 | $(d_1 C u_1)\,(u_1 C e_1)$ | C |
| duue_1112 | $(d_1 C u_1)\,(u_1 C e_2)$ | C |
| duue_1113 | $(d_1 C u_1)\,(u_1 C e_3)$ | C |
| duue_1121 | $(d_1 C u_1)\,(u_2 C e_1)$ | C |
| duue_1122 | $(d_1 C u_1)\,(u_2 C e_2)$ | C |
| duue_1123 | $(d_1 C u_1)\,(u_2 C e_3)$ | C |
| duue_1131 | $(d_1 C u_1)\,(u_3 C e_1)$ | C |
| duue_1132 | $(d_1 C u_1)\,(u_3 C e_2)$ | C |
| duue_1133 | $(d_1 C u_1)\,(u_3 C e_3)$ | C |
| duue_1211 | $(d_1 C u_2)\,(u_1 C e_1)$ | C |
| duue_1212 | $(d_1 C u_2)\,(u_1 C e_2)$ | C |
| duue_1213 | $(d_1 C u_2)\,(u_1 C e_3)$ | C |
| duue_1221 | $(d_1 C u_2)\,(u_2 C e_1)$ | C |
| duue_1222 | $(d_1 C u_2)\,(u_2 C e_2)$ | C |
| duue_1223 | $(d_1 C u_2)\,(u_2 C e_3)$ | C |
| duue_1231 | $(d_1 C u_2)\,(u_3 C e_1)$ | C |
| duue_1232 | $(d_1 C u_2)\,(u_3 C e_2)$ | C |
| duue_1233 | $(d_1 C u_2)\,(u_3 C e_3)$ | C |
| duue_1311 | $(d_1 C u_3)\,(u_1 C e_1)$ | C |
| duue_1312 | $(d_1 C u_3)\,(u_1 C e_2)$ | C |
| duue_1313 | $(d_1 C u_3)\,(u_1 C e_3)$ | C |
| duue_1321 | $(d_1 C u_3)\,(u_2 C e_1)$ | C |
| duue_1322 | $(d_1 C u_3)\,(u_2 C e_2)$ | C |
| duue_1323 | $(d_1 C u_3)\,(u_2 C e_3)$ | C |
| duue_1331 | $(d_1 C u_3)\,(u_3 C e_1)$ | C |
| duue_1332 | $(d_1 C u_3)\,(u_3 C e_2)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| duue_1333 | $(d_1Cu_3)(u_3Ce_3)$ | C |
| duue_2111 | $(d_2Cu_1)(u_1Ce_1)$ | C |
| duue_2112 | $(d_2Cu_1)(u_1Ce_2)$ | C |
| duue_2113 | $(d_2Cu_1)(u_1Ce_3)$ | C |
| duue_2121 | $(d_2Cu_1)(u_2Ce_1)$ | C |
| duue_2122 | $(d_2Cu_1)(u_2Ce_2)$ | C |
| duue_2123 | $(d_2Cu_1)(u_2Ce_3)$ | C |
| duue_2131 | $(d_2Cu_1)(u_3Ce_1)$ | C |
| duue_2132 | $(d_2Cu_1)(u_3Ce_2)$ | C |
| duue_2133 | $(d_2Cu_1)(u_3Ce_3)$ | C |
| duue_2211 | $(d_2Cu_2)(u_1Ce_1)$ | C |
| duue_2212 | $(d_2Cu_2)(u_1Ce_2)$ | C |
| duue_2213 | $(d_2Cu_2)(u_1Ce_3)$ | C |
| duue_2221 | $(d_2Cu_2)(u_2Ce_1)$ | C |
| duue_2222 | $(d_2Cu_2)(u_2Ce_2)$ | C |
| duue_2223 | $(d_2Cu_2)(u_2Ce_3)$ | C |
| duue_2231 | $(d_2Cu_2)(u_3Ce_1)$ | C |
| duue_2232 | $(d_2Cu_2)(u_3Ce_2)$ | C |
| duue_2233 | $(d_2Cu_2)(u_3Ce_3)$ | C |
| duue_2311 | $(d_2Cu_3)(u_1Ce_1)$ | C |
| duue_2312 | $(d_2Cu_3)(u_1Ce_2)$ | C |
| duue_2313 | $(d_2Cu_3)(u_1Ce_3)$ | C |
| duue_2321 | $(d_2Cu_3)(u_2Ce_1)$ | C |
| duue_2322 | $(d_2Cu_3)(u_2Ce_2)$ | C |
| duue_2323 | $(d_2Cu_3)(u_2Ce_3)$ | C |
| duue_2331 | $(d_2Cu_3)(u_3Ce_1)$ | C |
| duue_2332 | $(d_2Cu_3)(u_3Ce_2)$ | C |
| duue_2333 | $(d_2Cu_3)(u_3Ce_3)$ | C |
| duue_3111 | $(d_3Cu_1)(u_1Ce_1)$ | C |
| duue_3112 | $(d_3Cu_1)(u_1Ce_2)$ | C |
| duue_3113 | $(d_3Cu_1)(u_1Ce_3)$ | C |
| duue_3121 | $(d_3Cu_1)(u_2Ce_1)$ | C |
| duue_3122 | $(d_3Cu_1)(u_2Ce_2)$ | C |
| duue_3123 | $(d_3Cu_1)(u_2Ce_3)$ | C |
| duue_3131 | $(d_3Cu_1)(u_3Ce_1)$ | C |
| duue_3132 | $(d_3Cu_1)(u_3Ce_2)$ | C |
| duue_3133 | $(d_3Cu_1)(u_3Ce_3)$ | C |
| duue_3211 | $(d_3Cu_2)(u_1Ce_1)$ | C |
| duue_3212 | $(d_3Cu_2)(u_1Ce_2)$ | C |
| duue_3213 | $(d_3Cu_2)(u_1Ce_3)$ | C |
| duue_3221 | $(d_3Cu_2)(u_2Ce_1)$ | C |
| duue_3222 | $(d_3Cu_2)(u_2Ce_2)$ | C |
| duue_3223 | $(d_3Cu_2)(u_2Ce_3)$ | C |
| duue_3231 | $(d_3Cu_2)(u_3Ce_1)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| duue_3232 | $(d_3 C u_2)(u_3 C e_2)$ | C |
| duue_3233 | $(d_3 C u_2)(u_3 C e_3)$ | C |
| duue_3311 | $(d_3 C u_3)(u_1 C e_1)$ | C |
| duue_3312 | $(d_3 C u_3)(u_1 C e_2)$ | C |
| duue_3313 | $(d_3 C u_3)(u_1 C e_3)$ | C |
| duue_3321 | $(d_3 C u_3)(u_2 C e_1)$ | C |
| duue_3322 | $(d_3 C u_3)(u_2 C e_2)$ | C |
| duue_3323 | $(d_3 C u_3)(u_2 C e_3)$ | C |
| duue_3331 | $(d_3 C u_3)(u_3 C e_1)$ | C |
| duue_3332 | $(d_3 C u_3)(u_3 C e_2)$ | C |
| duue_3333 | $(d_3 C u_3)(u_3 C e_3)$ | C |

`dL=2`

| WC name | Operator | Type |
| --- | --- | --- |
| llphiphi_11 | $\left(\widetilde{\varphi}^\dagger \ell_1\right)^T C \left(\widetilde{\varphi}^\dagger \ell_1\right)$ | C |
| llphiphi_22 | $\left(\widetilde{\varphi}^\dagger \ell_2\right)^T C \left(\widetilde{\varphi}^\dagger \ell_2\right)$ | C |
| llphiphi_33 | $\left(\widetilde{\varphi}^\dagger \ell_3\right)^T C \left(\widetilde{\varphi}^\dagger \ell_3\right)$ | C |

# Basis `Warsaw` (EFT `SMEFT`)

Basis suggested by Grzadkowski, Iskrzyński, Misiak, and Rosiek (arXiv:1008.4884v3). At variance with their definition, the Wilson coefficients are defined to be dimensionful, such that $\mathcal{L} = \sum_i C_i O_i$. The set of redundant operators coincides with the choice of DSixTools (arXiv:1704.04504). The weak basis for the fermion fields is chosen such that the running dimension-6 mass matrices of charged leptons and down-type quarks are diagonal at the scale where the coefficient values are specified, while up-type quark singlet field is rotated to diagonalise the running dimension-6 up-type quark mass matrix "from the right".

## Sectors

`dB=dL=0`

| WC name | Operator | Type |
|---|---|---|
| `G` | $f^{ABC}G_\mu^{A\nu}G_\nu^{B\rho}G_\rho^{C\mu}$ | R |
| `Gtilde` | $f^{ABC}\widetilde{G}_\mu^{A\nu}G_\nu^{B\rho}G_\rho^{C\mu}$ | R |
| `W` | $\epsilon^{IJK}W_\mu^{I\nu}W_\nu^{J\rho}W_\rho^{K\mu}$ | R |
| `Wtilde` | $\epsilon^{IJK}\widetilde{W}_\mu^{I\nu}W_\nu^{J\rho}W_\rho^{K\mu}$ | R |
| `phi` | $\left(\varphi^\dagger\varphi\right)^3$ | R |
| `phiBox` | $\left(\varphi^\dagger\varphi\right)\Box\left(\varphi^\dagger\varphi\right)$ | R |
| `phiD` | $\left(\varphi^\dagger D^\mu\varphi\right)^*\left(\varphi^\dagger D_\mu\varphi\right)$ | R |
| `phiG` | $\varphi^\dagger\varphi G_{\mu\nu}^A G^{A\mu\nu}$ | R |
| `phiB` | $\varphi^\dagger\varphi B_{\mu\nu}B^{\mu\nu}$ | R |
| `phiW` | $\varphi^\dagger\varphi W_{\mu\nu}^I W^{I\mu\nu}$ | R |
| `phiWB` | $\varphi^\dagger\tau^I\varphi W_{\mu\nu}^I B^{\mu\nu}$ | R |
| `phiGtilde` | $\varphi^\dagger\varphi\widetilde{G}_{\mu\nu}^A G^{A\mu\nu}$ | R |
| `phiBtilde` | $\varphi^\dagger\varphi\widetilde{B}_{\mu\nu}B^{\mu\nu}$ | R |
| `phiWtilde` | $\varphi^\dagger\varphi\widetilde{W}_{\mu\nu}^I W^{I\mu\nu}$ | R |
| `phiWtildeB` | $\varphi^\dagger\tau^I\varphi\widetilde{W}_{\mu\nu}^I B^{\mu\nu}$ | R |
| `uphi_11` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 u_1\widetilde{\varphi}\right)$ | C |
| `uphi_12` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 u_2\widetilde{\varphi}\right)$ | C |
| `uphi_13` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 u_3\widetilde{\varphi}\right)$ | C |
| `uphi_21` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 u_1\widetilde{\varphi}\right)$ | C |
| `uphi_22` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 u_2\widetilde{\varphi}\right)$ | C |
| `uphi_23` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 u_3\widetilde{\varphi}\right)$ | C |
| `uphi_31` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 u_1\widetilde{\varphi}\right)$ | C |
| `uphi_32` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 u_2\widetilde{\varphi}\right)$ | C |
| `uphi_33` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 u_3\widetilde{\varphi}\right)$ | C |
| `dphi_11` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 d_1\varphi\right)$ | C |
| `dphi_12` | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 d_2\varphi\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| dphi_13 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_1 d_3\varphi\right)$ | C |
| dphi_21 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 d_1\varphi\right)$ | C |
| dphi_22 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 d_2\varphi\right)$ | C |
| dphi_23 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_2 d_3\varphi\right)$ | C |
| dphi_31 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 d_1\varphi\right)$ | C |
| dphi_32 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 d_2\varphi\right)$ | C |
| dphi_33 | $\left(\varphi^\dagger\varphi\right)\left(\bar{q}_3 d_3\varphi\right)$ | C |
| ephi_11 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_1 e_1\varphi\right)$ | C |
| ephi_12 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_1 e_2\varphi\right)$ | C |
| ephi_13 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_1 e_3\varphi\right)$ | C |
| ephi_21 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_2 e_1\varphi\right)$ | C |
| ephi_22 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_2 e_2\varphi\right)$ | C |
| ephi_23 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_2 e_3\varphi\right)$ | C |
| ephi_31 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_3 e_1\varphi\right)$ | C |
| ephi_32 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_3 e_2\varphi\right)$ | C |
| ephi_33 | $\left(\varphi^\dagger\varphi\right)\left(\bar{\ell}_3 e_3\varphi\right)$ | C |
| eW_11 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_1\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_12 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_2\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_13 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_3\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_21 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_1\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_22 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_2\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_23 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_3\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_31 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_1\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_32 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_2\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eW_33 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_3\right)\tau^I\varphi W^I_{\mu\nu}$ | C |
| eB_11 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_1\right)\varphi B_{\mu\nu}$ | C |
| eB_12 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_2\right)\varphi B_{\mu\nu}$ | C |
| eB_13 | $\left(\bar{\ell}_1\sigma^{\mu\nu}e_3\right)\varphi B_{\mu\nu}$ | C |
| eB_21 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_1\right)\varphi B_{\mu\nu}$ | C |
| eB_22 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_2\right)\varphi B_{\mu\nu}$ | C |
| eB_23 | $\left(\bar{\ell}_2\sigma^{\mu\nu}e_3\right)\varphi B_{\mu\nu}$ | C |
| eB_31 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_1\right)\varphi B_{\mu\nu}$ | C |
| eB_32 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_2\right)\varphi B_{\mu\nu}$ | C |
| eB_33 | $\left(\bar{\ell}_3\sigma^{\mu\nu}e_3\right)\varphi B_{\mu\nu}$ | C |
| uG_11 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A u_1\right)\widetilde{\varphi} G^A_{\mu\nu}$ | C |
| uG_12 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A u_2\right)\widetilde{\varphi} G^A_{\mu\nu}$ | C |
| uG_13 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A u_3\right)\widetilde{\varphi} G^A_{\mu\nu}$ | C |
| uG_21 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A u_1\right)\widetilde{\varphi} G^A_{\mu\nu}$ | C |
| uG_22 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A u_2\right)\widetilde{\varphi} G^A_{\mu\nu}$ | C |
| uG_23 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A u_3\right)\widetilde{\varphi} G^A_{\mu\nu}$ | C |
| uG_31 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A u_1\right)\widetilde{\varphi} G^A_{\mu\nu}$ | C |
| uG_32 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A u_2\right)\widetilde{\varphi} G^A_{\mu\nu}$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| uG_33 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A u_3\right)\widetilde{\varphi}G_{\mu\nu}^A$ | C |
| uW_11 | $\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uW_12 | $\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uW_13 | $\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uW_21 | $\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uW_22 | $\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uW_23 | $\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uW_31 | $\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uW_32 | $\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uW_33 | $\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)\tau^I\widetilde{\varphi}W_{\mu\nu}^I$ | C |
| uB_11 | $\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| uB_12 | $\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| uB_13 | $\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| uB_21 | $\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| uB_22 | $\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| uB_23 | $\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| uB_31 | $\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| uB_32 | $\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| uB_33 | $\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)\widetilde{\varphi}B_{\mu\nu}$ | C |
| dG_11 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A d_1\right)\varphi G_{\mu\nu}^A$ | C |
| dG_12 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A d_2\right)\varphi G_{\mu\nu}^A$ | C |
| dG_13 | $\left(\bar{q}_1\sigma^{\mu\nu}T^A d_3\right)\varphi G_{\mu\nu}^A$ | C |
| dG_21 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A d_1\right)\varphi G_{\mu\nu}^A$ | C |
| dG_22 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A d_2\right)\varphi G_{\mu\nu}^A$ | C |
| dG_23 | $\left(\bar{q}_2\sigma^{\mu\nu}T^A d_3\right)\varphi G_{\mu\nu}^A$ | C |
| dG_31 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A d_1\right)\varphi G_{\mu\nu}^A$ | C |
| dG_32 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A d_2\right)\varphi G_{\mu\nu}^A$ | C |
| dG_33 | $\left(\bar{q}_3\sigma^{\mu\nu}T^A d_3\right)\varphi G_{\mu\nu}^A$ | C |
| dW_11 | $\left(\bar{q}_1\sigma^{\mu\nu}d_1\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dW_12 | $\left(\bar{q}_1\sigma^{\mu\nu}d_2\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dW_13 | $\left(\bar{q}_1\sigma^{\mu\nu}d_3\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dW_21 | $\left(\bar{q}_2\sigma^{\mu\nu}d_1\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dW_22 | $\left(\bar{q}_2\sigma^{\mu\nu}d_2\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dW_23 | $\left(\bar{q}_2\sigma^{\mu\nu}d_3\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dW_31 | $\left(\bar{q}_3\sigma^{\mu\nu}d_1\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dW_32 | $\left(\bar{q}_3\sigma^{\mu\nu}d_2\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dW_33 | $\left(\bar{q}_3\sigma^{\mu\nu}d_3\right)\tau^I\varphi W_{\mu\nu}^I$ | C |
| dB_11 | $\left(\bar{q}_1\sigma^{\mu\nu}d_1\right)\varphi B_{\mu\nu}$ | C |
| dB_12 | $\left(\bar{q}_1\sigma^{\mu\nu}d_2\right)\varphi B_{\mu\nu}$ | C |
| dB_13 | $\left(\bar{q}_1\sigma^{\mu\nu}d_3\right)\varphi B_{\mu\nu}$ | C |
| dB_21 | $\left(\bar{q}_2\sigma^{\mu\nu}d_1\right)\varphi B_{\mu\nu}$ | C |
| dB_22 | $\left(\bar{q}_2\sigma^{\mu\nu}d_2\right)\varphi B_{\mu\nu}$ | C |
| dB_23 | $\left(\bar{q}_2\sigma^{\mu\nu}d_3\right)\varphi B_{\mu\nu}$ | C |

| WC name | Operator | Type |
|---|---|---|
| dB_31 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_1\right) \varphi B_{\mu\nu}$ | C |
| dB_32 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_2\right) \varphi B_{\mu\nu}$ | C |
| dB_33 | $\left(\bar{q}_3 \sigma^{\mu\nu} d_3\right) \varphi B_{\mu\nu}$ | C |
| phil1_11 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{\ell}_1 \gamma^\mu \ell_1\right)$ | R |
| phil1_12 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{\ell}_1 \gamma^\mu \ell_2\right)$ | C |
| phil1_13 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{\ell}_1 \gamma^\mu \ell_3\right)$ | C |
| phil1_22 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{\ell}_2 \gamma^\mu \ell_2\right)$ | R |
| phil1_23 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{\ell}_2 \gamma^\mu \ell_3\right)$ | C |
| phil1_33 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{\ell}_3 \gamma^\mu \ell_3\right)$ | R |
| phil3_11 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D} Imu \varphi\right)\left(\bar{\ell}_1 \tau^I \gamma^\mu \ell_1\right)$ | R |
| phil3_12 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D} Imu \varphi\right)\left(\bar{\ell}_1 \tau^I \gamma^\mu \ell_2\right)$ | C |
| phil3_13 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D} Imu \varphi\right)\left(\bar{\ell}_1 \tau^I \gamma^\mu \ell_3\right)$ | C |
| phil3_22 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D} Imu \varphi\right)\left(\bar{\ell}_2 \tau^I \gamma^\mu \ell_2\right)$ | R |
| phil3_23 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D} Imu \varphi\right)\left(\bar{\ell}_2 \tau^I \gamma^\mu \ell_3\right)$ | C |
| phil3_33 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D} Imu \varphi\right)\left(\bar{\ell}_3 \tau^I \gamma^\mu \ell_3\right)$ | R |
| phie_11 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{e}_1 \gamma^\mu e_1\right)$ | R |
| phie_12 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{e}_1 \gamma^\mu e_2\right)$ | C |
| phie_13 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{e}_1 \gamma^\mu e_3\right)$ | C |
| phie_22 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{e}_2 \gamma^\mu e_2\right)$ | R |
| phie_23 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{e}_2 \gamma^\mu e_3\right)$ | C |
| phie_33 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{e}_3 \gamma^\mu e_3\right)$ | R |
| phiq1_11 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{q}_1 \gamma^\mu q_1\right)$ | R |
| phiq1_12 | $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right)\left(\bar{q}_1 \gamma^\mu q_2\right)$ | C |

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| WC name | Operator | Type |
|---|---|---|
| phiq1_13 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{q}_1\gamma^\mu q_3)$ | C |
| phiq1_22 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{q}_2\gamma^\mu q_2)$ | R |
| phiq1_23 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{q}_2\gamma^\mu q_3)$ | C |
| phiq1_33 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{q}_3\gamma^\mu q_3)$ | R |
| phiq3_11 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)\left(\bar{q}_1\tau^I\gamma^\mu q_1\right)$ | R |
| phiq3_12 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)\left(\bar{q}_1\tau^I\gamma^\mu q_2\right)$ | C |
| phiq3_13 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)\left(\bar{q}_1\tau^I\gamma^\mu q_3\right)$ | C |
| phiq3_22 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)\left(\bar{q}_2\tau^I\gamma^\mu q_2\right)$ | R |
| phiq3_23 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)\left(\bar{q}_2\tau^I\gamma^\mu q_3\right)$ | C |
| phiq3_33 | $\left(\varphi^\dagger i\overleftrightarrow{D}Imu\varphi\right)\left(\bar{q}_3\tau^I\gamma^\mu q_3\right)$ | R |
| phiu_11 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{u}_1\gamma^\mu u_1)$ | R |
| phiu_12 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{u}_1\gamma^\mu u_2)$ | C |
| phiu_13 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{u}_1\gamma^\mu u_3)$ | C |
| phiu_22 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{u}_2\gamma^\mu u_2)$ | R |
| phiu_23 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{u}_2\gamma^\mu u_3)$ | C |
| phiu_33 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)(\bar{u}_3\gamma^\mu u_3)$ | R |
| phid_11 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| phid_12 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| phid_13 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| phid_22 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| phid_23 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| phid_33 | $\left(\varphi^\dagger i\overleftrightarrow{D}_\mu\varphi\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |

| WC name | Operator | Type |
|---|---|---|
| phiud_11 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_1\gamma^\mu d_1\right)$ | C |
| phiud_12 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_1\gamma^\mu d_2\right)$ | C |
| phiud_13 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_1\gamma^\mu d_3\right)$ | C |
| phiud_21 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_2\gamma^\mu d_1\right)$ | C |
| phiud_22 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_2\gamma^\mu d_2\right)$ | C |
| phiud_23 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_2\gamma^\mu d_3\right)$ | C |
| phiud_31 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_3\gamma^\mu d_1\right)$ | C |
| phiud_32 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_3\gamma^\mu d_2\right)$ | C |
| phiud_33 | $\left(\widetilde{\varphi}^\dagger iD_\mu\varphi\right)\left(\bar{u}_3\gamma^\mu d_3\right)$ | C |
| ll_1111 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{\ell}_1\gamma^\mu\ell_1\right)$ | R |
| ll_1112 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{\ell}_1\gamma^\mu\ell_2\right)$ | C |
| ll_1113 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{\ell}_1\gamma^\mu\ell_3\right)$ | C |
| ll_1122 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{\ell}_2\gamma^\mu\ell_2\right)$ | R |
| ll_1123 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{\ell}_2\gamma^\mu\ell_3\right)$ | C |
| ll_1133 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{\ell}_3\gamma^\mu\ell_3\right)$ | R |
| ll_1212 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{\ell}_1\gamma^\mu\ell_2\right)$ | C |
| ll_1213 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{\ell}_1\gamma^\mu\ell_3\right)$ | C |
| ll_1221 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{\ell}_2\gamma^\mu\ell_1\right)$ | R |
| ll_1222 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{\ell}_2\gamma^\mu\ell_2\right)$ | C |
| ll_1223 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{\ell}_2\gamma^\mu\ell_3\right)$ | C |
| ll_1231 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{\ell}_3\gamma^\mu\ell_1\right)$ | C |
| ll_1232 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{\ell}_3\gamma^\mu\ell_2\right)$ | C |
| ll_1233 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{\ell}_3\gamma^\mu\ell_3\right)$ | C |
| ll_1313 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{\ell}_1\gamma^\mu\ell_3\right)$ | C |
| ll_1322 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{\ell}_2\gamma^\mu\ell_2\right)$ | C |
| ll_1323 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{\ell}_2\gamma^\mu\ell_3\right)$ | C |
| ll_1331 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{\ell}_3\gamma^\mu\ell_1\right)$ | R |
| ll_1332 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{\ell}_3\gamma^\mu\ell_2\right)$ | C |
| ll_1333 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{\ell}_3\gamma^\mu\ell_3\right)$ | C |
| ll_2222 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{\ell}_2\gamma^\mu\ell_2\right)$ | R |
| ll_2223 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{\ell}_2\gamma^\mu\ell_3\right)$ | C |
| ll_2233 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{\ell}_3\gamma^\mu\ell_3\right)$ | R |
| ll_2323 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{\ell}_2\gamma^\mu\ell_3\right)$ | C |
| ll_2332 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{\ell}_3\gamma^\mu\ell_2\right)$ | R |
| ll_2333 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{\ell}_3\gamma^\mu\ell_3\right)$ | C |
| ll_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{\ell}_3\gamma^\mu\ell_3\right)$ | R |
| qq1_1111 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | R |
| qq1_1112 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| qq1_1113 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| qq1_1122 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | R |
| qq1_1123 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| qq1_1133 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| qq1_1212 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |

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| WC name | Operator | Type |
| --- | --- | --- |
| qq1_1213 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| qq1_1221 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{q}_2\gamma^\mu q_1\right)$ | R |
| qq1_1222 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | C |
| qq1_1223 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| qq1_1231 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{q}_3\gamma^\mu q_1\right)$ | C |
| qq1_1232 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | C |
| qq1_1233 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |
| qq1_1313 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| qq1_1322 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | C |
| qq1_1323 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| qq1_1331 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{q}_3\gamma^\mu q_1\right)$ | R |
| qq1_1332 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | C |
| qq1_1333 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |
| qq1_2222 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | R |
| qq1_2223 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| qq1_2233 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| qq1_2323 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| qq1_2332 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | R |
| qq1_2333 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |
| qq1_3333 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| qq3_1111 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | R |
| qq3_1112 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1113 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1122 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| qq3_1123 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1133 | $\left(\bar{q}_1\gamma_\mu\tau^I q_1\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| qq3_1212 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1213 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1221 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_1\right)$ | R |
| qq3_1222 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1223 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1231 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | C |
| qq3_1232 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1233 | $\left(\bar{q}_1\gamma_\mu\tau^I q_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1313 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1322 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1323 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_1331 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | R |
| qq3_1332 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| qq3_1333 | $\left(\bar{q}_1\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_2222 | $\left(\bar{q}_2\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| qq3_2223 | $\left(\bar{q}_2\gamma_\mu\tau^I q_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_2233 | $\left(\bar{q}_2\gamma_\mu\tau^I q_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| qq3_2323 | $\left(\bar{q}_2\gamma_\mu\tau^I q_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| qq3_2332 | $\left(\bar{q}_2\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | R |
| qq3_2333 | $\left(\bar{q}_2\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| qq3_3333 | $\left(\bar{q}_3\gamma_\mu\tau^I q_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| lq1_1111 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | R |
| lq1_1112 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_1113 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_1122 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | R |
| lq1_1123 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_1133 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| lq1_1211 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | C |
| lq1_1212 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_1213 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_1221 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_1\right)$ | C |
| lq1_1222 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | C |
| lq1_1223 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_1231 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_3\gamma^\mu q_1\right)$ | C |
| lq1_1232 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | C |
| lq1_1233 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |
| lq1_1311 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | C |
| lq1_1312 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_1313 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_1321 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_1\right)$ | C |
| lq1_1322 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | C |
| lq1_1323 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_1331 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_1\right)$ | C |
| lq1_1332 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | C |
| lq1_1333 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |
| lq1_2211 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | R |
| lq1_2212 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_2213 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_2222 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | R |
| lq1_2223 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_2233 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| lq1_2311 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | C |
| lq1_2312 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_2313 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_2321 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_1\right)$ | C |
| lq1_2322 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | C |
| lq1_2323 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_2331 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_1\right)$ | C |
| lq1_2332 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_2\right)$ | C |
| lq1_2333 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| lq1_3311 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_1\right)$ | R |
| lq1_3312 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_2\right)$ | C |
| lq1_3313 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_1\gamma^\mu q_3\right)$ | C |
| lq1_3322 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_2\right)$ | R |
| lq1_3323 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_2\gamma^\mu q_3\right)$ | C |
| lq1_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{q}_3\gamma^\mu q_3\right)$ | R |
| lq3_1111 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | R |
| lq3_1112 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1113 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1122 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| lq3_1123 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1133 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_1\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| lq3_1211 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1212 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1213 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1221 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1222 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1223 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1231 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1232 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1233 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1311 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1312 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1313 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1321 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1322 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1323 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_1331 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_1332 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_1333 | $\left(\bar{\ell}_1\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2211 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | R |
| lq3_2212 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_2213 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2222 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| lq3_2223 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2233 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_2\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| lq3_2311 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_2312 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_2313 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_2321 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_2322 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_2323 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |

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| WC name | Operator | Type |
|---------|----------|------|
| lq3_2331 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_1\right)$ | C |
| lq3_2332 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_2333 | $\left(\bar{\ell}_2\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_3311 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_1\right)$ | R |
| lq3_3312 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_2\right)$ | C |
| lq3_3313 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_1\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_3322 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_2\right)$ | R |
| lq3_3323 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_2\gamma^\mu\tau^I q_3\right)$ | C |
| lq3_3333 | $\left(\bar{\ell}_3\gamma_\mu\tau^I\ell_3\right)\left(\bar{q}_3\gamma^\mu\tau^I q_3\right)$ | R |
| ee_1111 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| ee_1112 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| ee_1113 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| ee_1122 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| ee_1123 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_1133 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| ee_1212 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| ee_1213 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| ee_1222 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| ee_1223 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_1232 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| ee_1233 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| ee_1313 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| ee_1323 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_1333 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| ee_2222 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| ee_2223 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_2233 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| ee_2323 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| ee_2333 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| ee_3333 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| uu_1111 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| uu_1112 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| uu_1113 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| uu_1122 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| uu_1123 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_1133 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| uu_1212 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| uu_1213 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| uu_1221 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | R |
| uu_1222 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| uu_1223 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_1231 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| uu_1232 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| uu_1233 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |

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| WC name | Operator | Type |
|---|---|---|
| uu_1313 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| uu_1322 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| uu_1323 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_1331 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | R |
| uu_1332 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| uu_1333 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| uu_2222 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| uu_2223 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_2233 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| uu_2323 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| uu_2332 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | R |
| uu_2333 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| uu_3333 | $\left(\bar{u}_3\gamma_\mu u_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| dd_1111 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| dd_1112 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| dd_1113 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| dd_1122 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| dd_1123 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_1133 | $\left(\bar{d}_1\gamma_\mu d_1\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| dd_1212 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| dd_1213 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| dd_1221 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | R |
| dd_1222 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| dd_1223 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_1231 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| dd_1232 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| dd_1233 | $\left(\bar{d}_1\gamma_\mu d_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| dd_1313 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| dd_1322 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| dd_1323 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_1331 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | R |
| dd_1332 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| dd_1333 | $\left(\bar{d}_1\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| dd_2222 | $\left(\bar{d}_2\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| dd_2223 | $\left(\bar{d}_2\gamma_\mu d_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_2233 | $\left(\bar{d}_2\gamma_\mu d_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| dd_2323 | $\left(\bar{d}_2\gamma_\mu d_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| dd_2332 | $\left(\bar{d}_2\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | R |
| dd_2333 | $\left(\bar{d}_2\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| dd_3333 | $\left(\bar{d}_3\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| eu_1111 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| eu_1112 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| eu_1113 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| eu_1122 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| eu_1123 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| eu_1133 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| eu_1211 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| eu_1212 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| eu_1213 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| eu_1221 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| eu_1222 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| eu_1223 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| eu_1231 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| eu_1232 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| eu_1233 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| eu_1311 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| eu_1312 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| eu_1313 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| eu_1321 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| eu_1322 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| eu_1323 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| eu_1331 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| eu_1332 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| eu_1333 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| eu_2211 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| eu_2212 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| eu_2213 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| eu_2222 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| eu_2223 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| eu_2233 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| eu_2311 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| eu_2312 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| eu_2313 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| eu_2321 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| eu_2322 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| eu_2323 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| eu_2331 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| eu_2332 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| eu_2333 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| eu_3311 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| eu_3312 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| eu_3313 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| eu_3322 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| eu_3323 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| eu_3333 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| ed_1111 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ed_1112 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| ed_1113 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_1122 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ed_1123 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_1133 | $\left(\bar{e}_1\gamma_\mu e_1\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ed_1211 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ed_1212 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_1213 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_1221 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ed_1222 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ed_1223 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_1231 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ed_1232 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ed_1233 | $\left(\bar{e}_1\gamma_\mu e_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ed_1311 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ed_1312 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_1313 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_1321 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ed_1322 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ed_1323 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_1331 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ed_1332 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ed_1333 | $\left(\bar{e}_1\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ed_2211 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ed_2212 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_2213 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_2222 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ed_2223 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_2233 | $\left(\bar{e}_2\gamma_\mu e_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ed_2311 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ed_2312 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_2313 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_2321 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ed_2322 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ed_2323 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ed_2331 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ed_2332 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ed_2333 | $\left(\bar{e}_2\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ed_3311 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ed_3312 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ed_3313 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ed_3322 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ed_3323 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| ed_3333 | $\left(\bar{e}_3\gamma_\mu e_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ud1_1111 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ud1_1112 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_1113 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_1122 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ud1_1123 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_1133 | $\left(\bar{u}_1\gamma_\mu u_1\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ud1_1211 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ud1_1212 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_1213 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_1221 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ud1_1222 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ud1_1223 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_1231 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ud1_1232 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ud1_1233 | $\left(\bar{u}_1\gamma_\mu u_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ud1_1311 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ud1_1312 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_1313 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_1321 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ud1_1322 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ud1_1323 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_1331 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ud1_1332 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ud1_1333 | $\left(\bar{u}_1\gamma_\mu u_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ud1_2211 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ud1_2212 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_2213 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_2222 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ud1_2223 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_2233 | $\left(\bar{u}_2\gamma_\mu u_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ud1_2311 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ud1_2312 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ud1_2313 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_2321 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ud1_2322 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ud1_2323 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_2331 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ud1_2332 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ud1_2333 | $\left(\bar{u}_2\gamma_\mu u_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ud1_3311 | $\left(\bar{u}_3\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ud1_3312 | $\left(\bar{u}_3\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| ud1_3313 | $\left(\bar{u}_3\gamma_\mu u_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ud1_3322 | $\left(\bar{u}_3\gamma_\mu u_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ud1_3323 | $\left(\bar{u}_3\gamma_\mu u_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ud1_3333 | $\left(\bar{u}_3\gamma_\mu u_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ud8_1111 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| ud8_1112 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_1113 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_1122 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| ud8_1123 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_1133 | $\left(\bar{u}_1\gamma_\mu T^A u_1\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| ud8_1211 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| ud8_1212 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_1213 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_1221 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| ud8_1222 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| ud8_1223 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_1231 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| ud8_1232 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| ud8_1233 | $\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| ud8_1311 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| ud8_1312 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_1313 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_1321 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| ud8_1322 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| ud8_1323 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_1331 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| ud8_1332 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| ud8_1333 | $\left(\bar{u}_1\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| ud8_2211 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| ud8_2212 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_2213 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_2222 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| ud8_2223 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_2233 | $\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| ud8_2311 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| ud8_2312 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_2313 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_2321 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| ud8_2322 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| ud8_2323 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_2331 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| ud8_2332 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| ud8_2333 | $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| ud8_3311 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| ud8_3312 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| ud8_3313 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| ud8_3322 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| ud8_3323 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| ud8_3333 | $\left(\bar{u}_3\gamma_\mu T^A u_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| le_1111 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| le_1112 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_1113 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_1122 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| le_1123 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_1133 | $\left(\bar{\ell}_1\gamma_\mu \ell_1\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| le_1211 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| le_1212 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_1213 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_1221 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| le_1222 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| le_1223 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_1231 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| le_1232 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| le_1233 | $\left(\bar{\ell}_1\gamma_\mu \ell_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| le_1311 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| le_1312 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_1313 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_1321 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| le_1322 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| le_1323 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_1331 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| le_1332 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| le_1333 | $\left(\bar{\ell}_1\gamma_\mu \ell_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| le_2211 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| le_2212 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_2213 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_2222 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| le_2223 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_2233 | $\left(\bar{\ell}_2\gamma_\mu \ell_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| le_2311 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| le_2312 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_2313 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_2321 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| le_2322 | $\left(\bar{\ell}_2\gamma_\mu \ell_3\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |

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| WC name | Operator | Type |
|---------|----------|------|
| le_2323 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_2331 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| le_2332 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| le_2333 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| le_3311 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| le_3312 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| le_3313 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| le_3322 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| le_3323 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| le_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| lu_1111 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| lu_1112 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_1113 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_1122 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| lu_1123 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_1133 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| lu_1211 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| lu_1212 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_1213 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_1221 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| lu_1222 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| lu_1223 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_1231 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| lu_1232 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| lu_1233 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| lu_1311 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| lu_1312 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_1313 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_1321 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| lu_1322 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| lu_1323 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_1331 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| lu_1332 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| lu_1333 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| lu_2211 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| lu_2212 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_2213 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_2222 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| lu_2223 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_2233 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| lu_2311 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| lu_2312 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| lu_2313 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_2321 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| lu_2322 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| lu_2323 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_2331 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| lu_2332 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| lu_2333 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| lu_3311 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| lu_3312 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| lu_3313 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| lu_3322 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| lu_3323 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| lu_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| ld_1111 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ld_1112 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_1113 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_1122 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ld_1123 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_1133 | $\left(\bar{\ell}_1\gamma_\mu\ell_1\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ld_1211 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ld_1212 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_1213 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_1221 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ld_1222 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ld_1223 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_1231 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ld_1232 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ld_1233 | $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ld_1311 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ld_1312 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_1313 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_1321 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ld_1322 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ld_1323 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_1331 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ld_1332 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ld_1333 | $\left(\bar{\ell}_1\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ld_2211 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ld_2212 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_2213 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_2222 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ld_2223 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| ld_2233 | $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| ld_2311 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| ld_2312 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_2313 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_2321 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| ld_2322 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| ld_2323 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_2331 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| ld_2332 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| ld_2333 | $\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| ld_3311 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| ld_3312 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| ld_3313 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| ld_3322 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| ld_3323 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| ld_3333 | $\left(\bar{\ell}_3\gamma_\mu\ell_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| qe_1111 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| qe_1112 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| qe_1113 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| qe_1122 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | R |
| qe_1123 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| qe_1133 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | R |
| qe_1211 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| qe_1212 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| qe_1213 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| qe_1221 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| qe_1222 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| qe_1223 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| qe_1231 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| qe_1232 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| qe_1233 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| qe_1311 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | C |
| qe_1312 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| qe_1313 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |
| qe_1321 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_2\gamma^\mu e_1\right)$ | C |
| qe_1322 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_2\gamma^\mu e_2\right)$ | C |
| qe_1323 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ | C |
| qe_1331 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_3\gamma^\mu e_1\right)$ | C |
| qe_1332 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_3\gamma^\mu e_2\right)$ | C |
| qe_1333 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{e}_3\gamma^\mu e_3\right)$ | C |
| qe_2211 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_1\right)$ | R |
| qe_2212 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_2\right)$ | C |
| qe_2213 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{e}_1\gamma^\mu e_3\right)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| qe_2222 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{e}_2 \gamma^\mu e_2)$ | R |
| qe_2223 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{e}_2 \gamma^\mu e_3)$ | C |
| qe_2233 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{e}_3 \gamma^\mu e_3)$ | R |
| qe_2311 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_1)$ | C |
| qe_2312 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_2)$ | C |
| qe_2313 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_3)$ | C |
| qe_2321 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_1)$ | C |
| qe_2322 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_2)$ | C |
| qe_2323 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_3)$ | C |
| qe_2331 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_1)$ | C |
| qe_2332 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_2)$ | C |
| qe_2333 | $(\bar{q}_2 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_3)$ | C |
| qe_3311 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_1)$ | R |
| qe_3312 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_2)$ | C |
| qe_3313 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_1 \gamma^\mu e_3)$ | C |
| qe_3322 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_2)$ | R |
| qe_3323 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_2 \gamma^\mu e_3)$ | C |
| qe_3333 | $(\bar{q}_3 \gamma_\mu q_3)(\bar{e}_3 \gamma^\mu e_3)$ | R |
| qu1_1111 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_1 \gamma^\mu u_1)$ | R |
| qu1_1112 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_1 \gamma^\mu u_2)$ | C |
| qu1_1113 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_1 \gamma^\mu u_3)$ | C |
| qu1_1122 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_2 \gamma^\mu u_2)$ | R |
| qu1_1123 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_2 \gamma^\mu u_3)$ | C |
| qu1_1133 | $(\bar{q}_1 \gamma_\mu q_1)(\bar{u}_3 \gamma^\mu u_3)$ | R |
| qu1_1211 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_1)$ | C |
| qu1_1212 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_2)$ | C |
| qu1_1213 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_3)$ | C |
| qu1_1221 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_1)$ | C |
| qu1_1222 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_2)$ | C |
| qu1_1223 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_2 \gamma^\mu u_3)$ | C |
| qu1_1231 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_3 \gamma^\mu u_1)$ | C |
| qu1_1232 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_3 \gamma^\mu u_2)$ | C |
| qu1_1233 | $(\bar{q}_1 \gamma_\mu q_2)(\bar{u}_3 \gamma^\mu u_3)$ | C |
| qu1_1311 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_1)$ | C |
| qu1_1312 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_2)$ | C |
| qu1_1313 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_1 \gamma^\mu u_3)$ | C |
| qu1_1321 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_1)$ | C |
| qu1_1322 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_2)$ | C |
| qu1_1323 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_2 \gamma^\mu u_3)$ | C |
| qu1_1331 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_1)$ | C |
| qu1_1332 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_2)$ | C |
| qu1_1333 | $(\bar{q}_1 \gamma_\mu q_3)(\bar{u}_3 \gamma^\mu u_3)$ | C |
| qu1_2211 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_1)$ | R |
| qu1_2212 | $(\bar{q}_2 \gamma_\mu q_2)(\bar{u}_1 \gamma^\mu u_2)$ | C |

| WC name | Operator | Type |
|---|---|---|
| qu1_2213 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| qu1_2222 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| qu1_2223 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| qu1_2233 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| qu1_2311 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | C |
| qu1_2312 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| qu1_2313 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| qu1_2321 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_1\right)$ | C |
| qu1_2322 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | C |
| qu1_2323 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| qu1_2331 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_3\gamma^\mu u_1\right)$ | C |
| qu1_2332 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_3\gamma^\mu u_2\right)$ | C |
| qu1_2333 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | C |
| qu1_3311 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_1\right)$ | R |
| qu1_3312 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_2\right)$ | C |
| qu1_3313 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_1\gamma^\mu u_3\right)$ | C |
| qu1_3322 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_2\right)$ | R |
| qu1_3323 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_2\gamma^\mu u_3\right)$ | C |
| qu1_3333 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{u}_3\gamma^\mu u_3\right)$ | R |
| qd1_1111 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| qd1_1112 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_1113 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_1122 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| qd1_1123 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_1133 | $\left(\bar{q}_1\gamma_\mu q_1\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| qd1_1211 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| qd1_1212 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_1213 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_1221 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| qd1_1222 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| qd1_1223 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_1231 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| qd1_1232 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| qd1_1233 | $\left(\bar{q}_1\gamma_\mu q_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| qd1_1311 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| qd1_1312 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_1313 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_1321 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| qd1_1322 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| qd1_1323 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_1331 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| qd1_1332 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| qd1_1333 | $\left(\bar{q}_1\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| qd1_2211 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| qd1_2212 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_2213 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_2222 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| qd1_2223 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_2233 | $\left(\bar{q}_2\gamma_\mu q_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| qd1_2311 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | C |
| qd1_2312 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_2313 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_2321 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_1\right)$ | C |
| qd1_2322 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | C |
| qd1_2323 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_2331 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_1\right)$ | C |
| qd1_2332 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_2\right)$ | C |
| qd1_2333 | $\left(\bar{q}_2\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | C |
| qd1_3311 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_1\right)$ | R |
| qd1_3312 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_2\right)$ | C |
| qd1_3313 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_1\gamma^\mu d_3\right)$ | C |
| qd1_3322 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_2\right)$ | R |
| qd1_3323 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_2\gamma^\mu d_3\right)$ | C |
| qd1_3333 | $\left(\bar{q}_3\gamma_\mu q_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$ | R |
| qu8_1111 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | R |
| qu8_1112 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_1113 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_1122 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | R |
| qu8_1123 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_1133 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | R |
| qu8_1211 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | C |
| qu8_1212 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_1213 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_1221 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_1\right)$ | C |
| qu8_1222 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | C |
| qu8_1223 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_1231 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_3\gamma^\mu T^A u_1\right)$ | C |
| qu8_1232 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_3\gamma^\mu T^A u_2\right)$ | C |
| qu8_1233 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | C |
| qu8_1311 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | C |
| qu8_1312 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_1313 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_1321 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_1\right)$ | C |
| qu8_1322 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | C |
| qu8_1323 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_1331 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_1\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| qu8_1332 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_2\right)$ | C |
| qu8_1333 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | C |
| qu8_2211 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | R |
| qu8_2212 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_2213 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_2222 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | R |
| qu8_2223 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_2233 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | R |
| qu8_2311 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | C |
| qu8_2312 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_2313 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_2321 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_1\right)$ | C |
| qu8_2322 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | C |
| qu8_2323 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_2331 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_1\right)$ | C |
| qu8_2332 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_2\right)$ | C |
| qu8_2333 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | C |
| qu8_3311 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_1\right)$ | R |
| qu8_3312 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_2\right)$ | C |
| qu8_3313 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_1\gamma^\mu T^A u_3\right)$ | C |
| qu8_3322 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_2\right)$ | R |
| qu8_3323 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_2\gamma^\mu T^A u_3\right)$ | C |
| qu8_3333 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{u}_3\gamma^\mu T^A u_3\right)$ | R |
| qd8_1111 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| qd8_1112 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_1113 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_1122 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| qd8_1123 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_1133 | $\left(\bar{q}_1\gamma_\mu T^A q_1\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| qd8_1211 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| qd8_1212 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_1213 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_1221 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| qd8_1222 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| qd8_1223 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_1231 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| qd8_1232 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| qd8_1233 | $\left(\bar{q}_1\gamma_\mu T^A q_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| qd8_1311 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| qd8_1312 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_1313 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_1321 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| qd8_1322 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| qd8_1323 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_1331 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| qd8_1332 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| qd8_1333 | $\left(\bar{q}_1\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| qd8_2211 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| qd8_2212 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_2213 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_2222 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| qd8_2223 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_2233 | $\left(\bar{q}_2\gamma_\mu T^A q_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| qd8_2311 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | C |
| qd8_2312 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_2313 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_2321 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_1\right)$ | C |
| qd8_2322 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | C |
| qd8_2323 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_2331 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_1\right)$ | C |
| qd8_2332 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_2\right)$ | C |
| qd8_2333 | $\left(\bar{q}_2\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | C |
| qd8_3311 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$ | R |
| qd8_3312 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_2\right)$ | C |
| qd8_3313 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ | C |
| qd8_3322 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_2\right)$ | R |
| qd8_3323 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_2\gamma^\mu T^A d_3\right)$ | C |
| qd8_3333 | $\left(\bar{q}_3\gamma_\mu T^A q_3\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$ | R |
| ledq_1111 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_1112 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_1113 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_1121 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_1122 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_1123 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_1131 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_1132 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_1133 | $\left(\bar{\ell}_1 e_1\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_1211 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_1212 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_1213 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_1221 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_1222 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_1223 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_1231 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_1232 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_3 q_2\right)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| ledq_1233 | $\left(\bar{\ell}_1 e_2\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_1311 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_1312 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_1313 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_1321 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_1322 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_1323 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_1331 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_1332 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_1333 | $\left(\bar{\ell}_1 e_3\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_2111 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_2112 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_2113 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_2121 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_2122 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_2123 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_2131 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_2132 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_2133 | $\left(\bar{\ell}_2 e_1\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_2211 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_2212 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_2213 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_2221 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_2222 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_2223 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_2231 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_2232 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_2233 | $\left(\bar{\ell}_2 e_2\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_2311 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_2312 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_2313 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_2321 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_2322 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_2323 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_2331 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_2332 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_2333 | $\left(\bar{\ell}_2 e_3\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_3111 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_3112 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_3113 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_3121 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_3122 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_2 q_2\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| ledq_3123 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_3131 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_3132 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_3133 | $\left(\bar{\ell}_3 e_1\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_3211 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_3212 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_3213 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_3221 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_3222 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_3223 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_3231 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_3232 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_3233 | $\left(\bar{\ell}_3 e_2\right)\left(\bar{d}_3 q_3\right)$ | C |
| ledq_3311 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_1 q_1\right)$ | C |
| ledq_3312 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_1 q_2\right)$ | C |
| ledq_3313 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_1 q_3\right)$ | C |
| ledq_3321 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_2 q_1\right)$ | C |
| ledq_3322 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_2 q_2\right)$ | C |
| ledq_3323 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_2 q_3\right)$ | C |
| ledq_3331 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_3 q_1\right)$ | C |
| ledq_3332 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_3 q_2\right)$ | C |
| ledq_3333 | $\left(\bar{\ell}_3 e_3\right)\left(\bar{d}_3 q_3\right)$ | C |
| quqd1_1111 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_1 d_1\right)$ | C |
| quqd1_1112 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_1 d_2\right)$ | C |
| quqd1_1113 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_1 d_3\right)$ | C |
| quqd1_1121 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_2 d_1\right)$ | C |
| quqd1_1122 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_2 d_2\right)$ | C |
| quqd1_1123 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_2 d_3\right)$ | C |
| quqd1_1131 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_3 d_1\right)$ | C |
| quqd1_1132 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_3 d_2\right)$ | C |
| quqd1_1133 | $\left(\bar{q}_1 u_1\right)\epsilon_{jk}\left(\bar{q}_3 d_3\right)$ | C |
| quqd1_1211 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_1 d_1\right)$ | C |
| quqd1_1212 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_1 d_2\right)$ | C |
| quqd1_1213 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_1 d_3\right)$ | C |
| quqd1_1221 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_2 d_1\right)$ | C |
| quqd1_1222 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_2 d_2\right)$ | C |
| quqd1_1223 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_2 d_3\right)$ | C |
| quqd1_1231 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_3 d_1\right)$ | C |
| quqd1_1232 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_3 d_2\right)$ | C |
| quqd1_1233 | $\left(\bar{q}_1 u_2\right)\epsilon_{jk}\left(\bar{q}_3 d_3\right)$ | C |
| quqd1_1311 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_1 d_1\right)$ | C |
| quqd1_1312 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_1 d_2\right)$ | C |
| quqd1_1313 | $\left(\bar{q}_1 u_3\right)\epsilon_{jk}\left(\bar{q}_1 d_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| quqd1_1321 | $(\bar{q}_1 u_3)\, \epsilon_{jk}\, (\bar{q}_2 d_1)$ | C |
| quqd1_1322 | $(\bar{q}_1 u_3)\, \epsilon_{jk}\, (\bar{q}_2 d_2)$ | C |
| quqd1_1323 | $(\bar{q}_1 u_3)\, \epsilon_{jk}\, (\bar{q}_2 d_3)$ | C |
| quqd1_1331 | $(\bar{q}_1 u_3)\, \epsilon_{jk}\, (\bar{q}_3 d_1)$ | C |
| quqd1_1332 | $(\bar{q}_1 u_3)\, \epsilon_{jk}\, (\bar{q}_3 d_2)$ | C |
| quqd1_1333 | $(\bar{q}_1 u_3)\, \epsilon_{jk}\, (\bar{q}_3 d_3)$ | C |
| quqd1_2111 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_1 d_1)$ | C |
| quqd1_2112 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_1 d_2)$ | C |
| quqd1_2113 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_1 d_3)$ | C |
| quqd1_2121 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_2 d_1)$ | C |
| quqd1_2122 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_2 d_2)$ | C |
| quqd1_2123 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_2 d_3)$ | C |
| quqd1_2131 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_3 d_1)$ | C |
| quqd1_2132 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_3 d_2)$ | C |
| quqd1_2133 | $(\bar{q}_2 u_1)\, \epsilon_{jk}\, (\bar{q}_3 d_3)$ | C |
| quqd1_2211 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_1 d_1)$ | C |
| quqd1_2212 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_1 d_2)$ | C |
| quqd1_2213 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_1 d_3)$ | C |
| quqd1_2221 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_2 d_1)$ | C |
| quqd1_2222 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_2 d_2)$ | C |
| quqd1_2223 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_2 d_3)$ | C |
| quqd1_2231 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_3 d_1)$ | C |
| quqd1_2232 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_3 d_2)$ | C |
| quqd1_2233 | $(\bar{q}_2 u_2)\, \epsilon_{jk}\, (\bar{q}_3 d_3)$ | C |
| quqd1_2311 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_1 d_1)$ | C |
| quqd1_2312 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_1 d_2)$ | C |
| quqd1_2313 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_1 d_3)$ | C |
| quqd1_2321 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_2 d_1)$ | C |
| quqd1_2322 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_2 d_2)$ | C |
| quqd1_2323 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_2 d_3)$ | C |
| quqd1_2331 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_3 d_1)$ | C |
| quqd1_2332 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_3 d_2)$ | C |
| quqd1_2333 | $(\bar{q}_2 u_3)\, \epsilon_{jk}\, (\bar{q}_3 d_3)$ | C |
| quqd1_3111 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_1 d_1)$ | C |
| quqd1_3112 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_1 d_2)$ | C |
| quqd1_3113 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_1 d_3)$ | C |
| quqd1_3121 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_2 d_1)$ | C |
| quqd1_3122 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_2 d_2)$ | C |
| quqd1_3123 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_2 d_3)$ | C |
| quqd1_3131 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_3 d_1)$ | C |
| quqd1_3132 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_3 d_2)$ | C |
| quqd1_3133 | $(\bar{q}_3 u_1)\, \epsilon_{jk}\, (\bar{q}_3 d_3)$ | C |
| quqd1_3211 | $(\bar{q}_3 u_2)\, \epsilon_{jk}\, (\bar{q}_1 d_1)$ | C |
| quqd1_3212 | $(\bar{q}_3 u_2)\, \epsilon_{jk}\, (\bar{q}_1 d_2)$ | C |

| WC name | Operator | Type |
|---|---|---|
| quqd1_3213 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_1 d_3)$ | C |
| quqd1_3221 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_1)$ | C |
| quqd1_3222 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_2)$ | C |
| quqd1_3223 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_2 d_3)$ | C |
| quqd1_3231 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_1)$ | C |
| quqd1_3232 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_3233 | $(\bar{q}_3 u_2)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd1_3311 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_1)$ | C |
| quqd1_3312 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_2)$ | C |
| quqd1_3313 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_1 d_3)$ | C |
| quqd1_3321 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_1)$ | C |
| quqd1_3322 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_2)$ | C |
| quqd1_3323 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_2 d_3)$ | C |
| quqd1_3331 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_1)$ | C |
| quqd1_3332 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_2)$ | C |
| quqd1_3333 | $(\bar{q}_3 u_3)\,\epsilon_{jk}\,(\bar{q}_3 d_3)$ | C |
| quqd8_1111 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_1)$ | C |
| quqd8_1112 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_2)$ | C |
| quqd8_1113 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_3)$ | C |
| quqd8_1121 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_1)$ | C |
| quqd8_1122 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_2)$ | C |
| quqd8_1123 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_3)$ | C |
| quqd8_1131 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_1)$ | C |
| quqd8_1132 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_2)$ | C |
| quqd8_1133 | $(\bar{q}_1 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_3)$ | C |
| quqd8_1211 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_1)$ | C |
| quqd8_1212 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_2)$ | C |
| quqd8_1213 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_3)$ | C |
| quqd8_1221 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_1)$ | C |
| quqd8_1222 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_2)$ | C |
| quqd8_1223 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_3)$ | C |
| quqd8_1231 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_1)$ | C |
| quqd8_1232 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_2)$ | C |
| quqd8_1233 | $(\bar{q}_1 T^A u_2)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_3)$ | C |
| quqd8_1311 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_1)$ | C |
| quqd8_1312 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_2)$ | C |
| quqd8_1313 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_3)$ | C |
| quqd8_1321 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_1)$ | C |
| quqd8_1322 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_2)$ | C |
| quqd8_1323 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_2 T^A d_3)$ | C |
| quqd8_1331 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_1)$ | C |
| quqd8_1332 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_2)$ | C |
| quqd8_1333 | $(\bar{q}_1 T^A u_3)\,\epsilon_{jk}\,(\bar{q}_3 T^A d_3)$ | C |
| quqd8_2111 | $(\bar{q}_2 T^A u_1)\,\epsilon_{jk}\,(\bar{q}_1 T^A d_1)$ | C |

| WC name | Operator | Type |
|---|---|---|
| quqd8_2112 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_2113 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_2121 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_2122 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_2123 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_2131 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_2132 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_2133 | $\left(\bar{q}_2 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_2211 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_2212 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_2213 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_2221 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_2222 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_2223 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_2231 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_2232 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_2233 | $\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_2311 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_2312 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_2313 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_2321 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_2322 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_2323 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_2331 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_2332 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_2333 | $\left(\bar{q}_2 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_3111 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_3112 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_3113 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_3121 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_3122 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_3123 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_3131 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_3132 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_3133 | $\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| quqd8_3211 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_3212 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_3213 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_3221 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_3222 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_3223 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_3231 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_3232 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_3233 | $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| quqd8_3311 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$ | C |
| quqd8_3312 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$ | C |
| quqd8_3313 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$ | C |
| quqd8_3321 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$ | C |
| quqd8_3322 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_2\right)$ | C |
| quqd8_3323 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$ | C |
| quqd8_3331 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$ | C |
| quqd8_3332 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$ | C |
| quqd8_3333 | $\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ | C |
| lequ1_1111 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_1112 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_1113 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_1121 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_1122 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_1123 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_1131 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_1132 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_1133 | $\left(\bar{\ell}_1 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_1211 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_1212 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_1213 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_1221 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_1222 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_1223 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_1231 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_1232 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_1233 | $\left(\bar{\ell}_1 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_1311 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_1312 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_1313 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_1321 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_1322 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_1323 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_1331 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_1332 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_1333 | $\left(\bar{\ell}_1 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_2111 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_2112 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_2113 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_2121 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_2122 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_2123 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| lequ1_2131 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_2132 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_2133 | $\left(\bar{\ell}_2 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_2211 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_2212 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_2213 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_2221 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_2222 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_2223 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_2231 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_2232 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_2233 | $\left(\bar{\ell}_2 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_2311 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_2312 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_2313 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_2321 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_2322 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_2323 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_2331 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_2332 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_2333 | $\left(\bar{\ell}_2 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_3111 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_3112 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_3113 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_3121 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_3122 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_3123 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_3131 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_3132 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_3133 | $\left(\bar{\ell}_3 e_1\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_3211 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_3212 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_3213 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |
| lequ1_3221 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_3222 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_3223 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_3231 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_3232 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_3233 | $\left(\bar{\ell}_3 e_2\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ1_3311 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_1\right)$ | C |
| lequ1_3312 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_2\right)$ | C |
| lequ1_3313 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_1 u_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| lequ1_3321 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_1\right)$ | C |
| lequ1_3322 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_2\right)$ | C |
| lequ1_3323 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_2 u_3\right)$ | C |
| lequ1_3331 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_1\right)$ | C |
| lequ1_3332 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_2\right)$ | C |
| lequ1_3333 | $\left(\bar{\ell}_3 e_3\right) \epsilon_{jk} \left(\bar{q}_3 u_3\right)$ | C |
| lequ3_1111 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1112 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1113 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1121 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1122 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1123 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1131 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1132 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1133 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1211 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1212 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1213 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1221 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1222 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1223 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1231 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1232 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1233 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1311 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1312 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1313 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1321 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1322 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1323 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_1331 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_1332 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_1333 | $\left(\bar{\ell}_1 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_2111 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_2112 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_2113 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_2121 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_2122 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_2123 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$ | C |
| lequ3_2131 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$ | C |
| lequ3_2132 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$ | C |
| lequ3_2133 | $\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$ | C |

| WC name | Operator | Type |
|---|---|---|
| lequ3_2211 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2212 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2213 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2221 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2222 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2223 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2231 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2232 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2233 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2311 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2312 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2313 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2321 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2322 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2323 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_2331 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_2332 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_2333 | $\left(\bar{\ell}_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3111 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3112 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3113 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3121 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3122 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3123 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3131 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3132 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3133 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_1\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3211 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3212 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3213 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3221 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3222 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3223 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3231 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3232 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3233 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3311 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3312 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3313 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ | C |
| lequ3_3321 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3322 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3323 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$ | C |

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| WC name | Operator | Type |
|---|---|---|
| lequ3_3331 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ | C |
| lequ3_3332 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ | C |
| lequ3_3333 | $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ | C |

**dB=dL=1**

| WC name | Operator | Type |
|---|---|---|
| duql_1111 | $(d_1Cu_1)(q_1C\ell_1)$ | C |
| duql_1112 | $(d_1Cu_1)(q_1C\ell_2)$ | C |
| duql_1113 | $(d_1Cu_1)(q_1C\ell_3)$ | C |
| duql_1121 | $(d_1Cu_1)(q_2C\ell_1)$ | C |
| duql_1122 | $(d_1Cu_1)(q_2C\ell_2)$ | C |
| duql_1123 | $(d_1Cu_1)(q_2C\ell_3)$ | C |
| duql_1131 | $(d_1Cu_1)(q_3C\ell_1)$ | C |
| duql_1132 | $(d_1Cu_1)(q_3C\ell_2)$ | C |
| duql_1133 | $(d_1Cu_1)(q_3C\ell_3)$ | C |
| duql_1211 | $(d_1Cu_2)(q_1C\ell_1)$ | C |
| duql_1212 | $(d_1Cu_2)(q_1C\ell_2)$ | C |
| duql_1213 | $(d_1Cu_2)(q_1C\ell_3)$ | C |
| duql_1221 | $(d_1Cu_2)(q_2C\ell_1)$ | C |
| duql_1222 | $(d_1Cu_2)(q_2C\ell_2)$ | C |
| duql_1223 | $(d_1Cu_2)(q_2C\ell_3)$ | C |
| duql_1231 | $(d_1Cu_2)(q_3C\ell_1)$ | C |
| duql_1232 | $(d_1Cu_2)(q_3C\ell_2)$ | C |
| duql_1233 | $(d_1Cu_2)(q_3C\ell_3)$ | C |
| duql_1311 | $(d_1Cu_3)(q_1C\ell_1)$ | C |
| duql_1312 | $(d_1Cu_3)(q_1C\ell_2)$ | C |
| duql_1313 | $(d_1Cu_3)(q_1C\ell_3)$ | C |
| duql_1321 | $(d_1Cu_3)(q_2C\ell_1)$ | C |
| duql_1322 | $(d_1Cu_3)(q_2C\ell_2)$ | C |
| duql_1323 | $(d_1Cu_3)(q_2C\ell_3)$ | C |
| duql_1331 | $(d_1Cu_3)(q_3C\ell_1)$ | C |
| duql_1332 | $(d_1Cu_3)(q_3C\ell_2)$ | C |
| duql_1333 | $(d_1Cu_3)(q_3C\ell_3)$ | C |
| duql_2111 | $(d_2Cu_1)(q_1C\ell_1)$ | C |
| duql_2112 | $(d_2Cu_1)(q_1C\ell_2)$ | C |
| duql_2113 | $(d_2Cu_1)(q_1C\ell_3)$ | C |
| duql_2121 | $(d_2Cu_1)(q_2C\ell_1)$ | C |
| duql_2122 | $(d_2Cu_1)(q_2C\ell_2)$ | C |
| duql_2123 | $(d_2Cu_1)(q_2C\ell_3)$ | C |
| duql_2131 | $(d_2Cu_1)(q_3C\ell_1)$ | C |
| duql_2132 | $(d_2Cu_1)(q_3C\ell_2)$ | C |

| WC name | Operator | Type |
|---|---|---|
| duql_2133 | $(d_2 C u_1)(q_3 C \ell_3)$ | C |
| duql_2211 | $(d_2 C u_2)(q_1 C \ell_1)$ | C |
| duql_2212 | $(d_2 C u_2)(q_1 C \ell_2)$ | C |
| duql_2213 | $(d_2 C u_2)(q_1 C \ell_3)$ | C |
| duql_2221 | $(d_2 C u_2)(q_2 C \ell_1)$ | C |
| duql_2222 | $(d_2 C u_2)(q_2 C \ell_2)$ | C |
| duql_2223 | $(d_2 C u_2)(q_2 C \ell_3)$ | C |
| duql_2231 | $(d_2 C u_2)(q_3 C \ell_1)$ | C |
| duql_2232 | $(d_2 C u_2)(q_3 C \ell_2)$ | C |
| duql_2233 | $(d_2 C u_2)(q_3 C \ell_3)$ | C |
| duql_2311 | $(d_2 C u_3)(q_1 C \ell_1)$ | C |
| duql_2312 | $(d_2 C u_3)(q_1 C \ell_2)$ | C |
| duql_2313 | $(d_2 C u_3)(q_1 C \ell_3)$ | C |
| duql_2321 | $(d_2 C u_3)(q_2 C \ell_1)$ | C |
| duql_2322 | $(d_2 C u_3)(q_2 C \ell_2)$ | C |
| duql_2323 | $(d_2 C u_3)(q_2 C \ell_3)$ | C |
| duql_2331 | $(d_2 C u_3)(q_3 C \ell_1)$ | C |
| duql_2332 | $(d_2 C u_3)(q_3 C \ell_2)$ | C |
| duql_2333 | $(d_2 C u_3)(q_3 C \ell_3)$ | C |
| duql_3111 | $(d_3 C u_1)(q_1 C \ell_1)$ | C |
| duql_3112 | $(d_3 C u_1)(q_1 C \ell_2)$ | C |
| duql_3113 | $(d_3 C u_1)(q_1 C \ell_3)$ | C |
| duql_3121 | $(d_3 C u_1)(q_2 C \ell_1)$ | C |
| duql_3122 | $(d_3 C u_1)(q_2 C \ell_2)$ | C |
| duql_3123 | $(d_3 C u_1)(q_2 C \ell_3)$ | C |
| duql_3131 | $(d_3 C u_1)(q_3 C \ell_1)$ | C |
| duql_3132 | $(d_3 C u_1)(q_3 C \ell_2)$ | C |
| duql_3133 | $(d_3 C u_1)(q_3 C \ell_3)$ | C |
| duql_3211 | $(d_3 C u_2)(q_1 C \ell_1)$ | C |
| duql_3212 | $(d_3 C u_2)(q_1 C \ell_2)$ | C |
| duql_3213 | $(d_3 C u_2)(q_1 C \ell_3)$ | C |
| duql_3221 | $(d_3 C u_2)(q_2 C \ell_1)$ | C |
| duql_3222 | $(d_3 C u_2)(q_2 C \ell_2)$ | C |
| duql_3223 | $(d_3 C u_2)(q_2 C \ell_3)$ | C |
| duql_3231 | $(d_3 C u_2)(q_3 C \ell_1)$ | C |
| duql_3232 | $(d_3 C u_2)(q_3 C \ell_2)$ | C |
| duql_3233 | $(d_3 C u_2)(q_3 C \ell_3)$ | C |
| duql_3311 | $(d_3 C u_3)(q_1 C \ell_1)$ | C |
| duql_3312 | $(d_3 C u_3)(q_1 C \ell_2)$ | C |
| duql_3313 | $(d_3 C u_3)(q_1 C \ell_3)$ | C |
| duql_3321 | $(d_3 C u_3)(q_2 C \ell_1)$ | C |
| duql_3322 | $(d_3 C u_3)(q_2 C \ell_2)$ | C |
| duql_3323 | $(d_3 C u_3)(q_2 C \ell_3)$ | C |
| duql_3331 | $(d_3 C u_3)(q_3 C \ell_1)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| duql_3332 | $(d_3 C u_3)(q_3 C \ell_2)$ | C |
| duql_3333 | $(d_3 C u_3)(q_3 C \ell_3)$ | C |
| qque_1111 | $(q_1 C q_1)(u_1 C e_1)$ | C |
| qque_1112 | $(q_1 C q_1)(u_1 C e_2)$ | C |
| qque_1113 | $(q_1 C q_1)(u_1 C e_3)$ | C |
| qque_1121 | $(q_1 C q_1)(u_2 C e_1)$ | C |
| qque_1122 | $(q_1 C q_1)(u_2 C e_2)$ | C |
| qque_1123 | $(q_1 C q_1)(u_2 C e_3)$ | C |
| qque_1131 | $(q_1 C q_1)(u_3 C e_1)$ | C |
| qque_1132 | $(q_1 C q_1)(u_3 C e_2)$ | C |
| qque_1133 | $(q_1 C q_1)(u_3 C e_3)$ | C |
| qque_1211 | $(q_1 C q_2)(u_1 C e_1)$ | C |
| qque_1212 | $(q_1 C q_2)(u_1 C e_2)$ | C |
| qque_1213 | $(q_1 C q_2)(u_1 C e_3)$ | C |
| qque_1221 | $(q_1 C q_2)(u_2 C e_1)$ | C |
| qque_1222 | $(q_1 C q_2)(u_2 C e_2)$ | C |
| qque_1223 | $(q_1 C q_2)(u_2 C e_3)$ | C |
| qque_1231 | $(q_1 C q_2)(u_3 C e_1)$ | C |
| qque_1232 | $(q_1 C q_2)(u_3 C e_2)$ | C |
| qque_1233 | $(q_1 C q_2)(u_3 C e_3)$ | C |
| qque_1311 | $(q_1 C q_3)(u_1 C e_1)$ | C |
| qque_1312 | $(q_1 C q_3)(u_1 C e_2)$ | C |
| qque_1313 | $(q_1 C q_3)(u_1 C e_3)$ | C |
| qque_1321 | $(q_1 C q_3)(u_2 C e_1)$ | C |
| qque_1322 | $(q_1 C q_3)(u_2 C e_2)$ | C |
| qque_1323 | $(q_1 C q_3)(u_2 C e_3)$ | C |
| qque_1331 | $(q_1 C q_3)(u_3 C e_1)$ | C |
| qque_1332 | $(q_1 C q_3)(u_3 C e_2)$ | C |
| qque_1333 | $(q_1 C q_3)(u_3 C e_3)$ | C |
| qque_2211 | $(q_2 C q_2)(u_1 C e_1)$ | C |
| qque_2212 | $(q_2 C q_2)(u_1 C e_2)$ | C |
| qque_2213 | $(q_2 C q_2)(u_1 C e_3)$ | C |
| qque_2221 | $(q_2 C q_2)(u_2 C e_1)$ | C |
| qque_2222 | $(q_2 C q_2)(u_2 C e_2)$ | C |
| qque_2223 | $(q_2 C q_2)(u_2 C e_3)$ | C |
| qque_2231 | $(q_2 C q_2)(u_3 C e_1)$ | C |
| qque_2232 | $(q_2 C q_2)(u_3 C e_2)$ | C |
| qque_2233 | $(q_2 C q_2)(u_3 C e_3)$ | C |
| qque_2311 | $(q_2 C q_3)(u_1 C e_1)$ | C |
| qque_2312 | $(q_2 C q_3)(u_1 C e_2)$ | C |
| qque_2313 | $(q_2 C q_3)(u_1 C e_3)$ | C |
| qque_2321 | $(q_2 C q_3)(u_2 C e_1)$ | C |
| qque_2322 | $(q_2 C q_3)(u_2 C e_2)$ | C |
| qque_2323 | $(q_2 C q_3)(u_2 C e_3)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| qque_2331 | $(q_2 C q_3)(u_3 C e_1)$ | C |
| qque_2332 | $(q_2 C q_3)(u_3 C e_2)$ | C |
| qque_2333 | $(q_2 C q_3)(u_3 C e_3)$ | C |
| qque_3311 | $(q_3 C q_3)(u_1 C e_1)$ | C |
| qque_3312 | $(q_3 C q_3)(u_1 C e_2)$ | C |
| qque_3313 | $(q_3 C q_3)(u_1 C e_3)$ | C |
| qque_3321 | $(q_3 C q_3)(u_2 C e_1)$ | C |
| qque_3322 | $(q_3 C q_3)(u_2 C e_2)$ | C |
| qque_3323 | $(q_3 C q_3)(u_2 C e_3)$ | C |
| qque_3331 | $(q_3 C q_3)(u_3 C e_1)$ | C |
| qque_3332 | $(q_3 C q_3)(u_3 C e_2)$ | C |
| qque_3333 | $(q_3 C q_3)(u_3 C e_3)$ | C |
| qqql_1111 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_1 C \ell_1)$ | C |
| qqql_1112 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_1 C \ell_2)$ | C |
| qqql_1113 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_1 C \ell_3)$ | C |
| qqql_1121 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_2 C \ell_1)$ | C |
| qqql_1122 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_2 C \ell_2)$ | C |
| qqql_1123 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_2 C \ell_3)$ | C |
| qqql_1131 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_3 C \ell_1)$ | C |
| qqql_1132 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_3 C \ell_2)$ | C |
| qqql_1133 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_1)(q_3 C \ell_3)$ | C |
| qqql_1211 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_1 C \ell_1)$ | C |
| qqql_1212 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_1 C \ell_2)$ | C |
| qqql_1213 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_1 C \ell_3)$ | C |
| qqql_1221 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_2 C \ell_1)$ | C |
| qqql_1222 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_2 C \ell_2)$ | C |
| qqql_1223 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_2 C \ell_3)$ | C |
| qqql_1231 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_3 C \ell_1)$ | C |
| qqql_1232 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_3 C \ell_2)$ | C |
| qqql_1233 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_2)(q_3 C \ell_3)$ | C |
| qqql_1311 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_1 C \ell_1)$ | C |
| qqql_1312 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_1 C \ell_2)$ | C |
| qqql_1313 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_1 C \ell_3)$ | C |
| qqql_1321 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_2 C \ell_1)$ | C |
| qqql_1322 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_2 C \ell_2)$ | C |
| qqql_1323 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_2 C \ell_3)$ | C |
| qqql_1331 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_3 C \ell_1)$ | C |
| qqql_1332 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_3 C \ell_2)$ | C |
| qqql_1333 | $\epsilon_{il}\epsilon_{jk}(q_1 C q_3)(q_3 C \ell_3)$ | C |
| qqql_2121 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_2 C \ell_1)$ | C |
| qqql_2122 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_2 C \ell_2)$ | C |
| qqql_2123 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_2 C \ell_3)$ | C |
| qqql_2131 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_3 C \ell_1)$ | C |
| qqql_2132 | $\epsilon_{il}\epsilon_{jk}(q_2 C q_1)(q_3 C \ell_2)$ | C |

| WC name | Operator | Type |
|---|---|---|
| qqql_2133 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_1\right)\left(q_3 C \ell_3\right)$ | C |
| qqql_2221 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_2\right)\left(q_2 C \ell_1\right)$ | C |
| qqql_2222 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_2\right)\left(q_2 C \ell_2\right)$ | C |
| qqql_2223 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_2\right)\left(q_2 C \ell_3\right)$ | C |
| qqql_2231 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_2\right)\left(q_3 C \ell_1\right)$ | C |
| qqql_2232 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_2\right)\left(q_3 C \ell_2\right)$ | C |
| qqql_2233 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_2\right)\left(q_3 C \ell_3\right)$ | C |
| qqql_2311 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_1 C \ell_1\right)$ | C |
| qqql_2312 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_1 C \ell_2\right)$ | C |
| qqql_2313 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_1 C \ell_3\right)$ | C |
| qqql_2321 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_2 C \ell_1\right)$ | C |
| qqql_2322 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_2 C \ell_2\right)$ | C |
| qqql_2323 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_2 C \ell_3\right)$ | C |
| qqql_2331 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_3 C \ell_1\right)$ | C |
| qqql_2332 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_3 C \ell_2\right)$ | C |
| qqql_2333 | $\epsilon_{il}\epsilon_{jk}\left(q_2 C q_3\right)\left(q_3 C \ell_3\right)$ | C |
| qqql_3131 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_1\right)\left(q_3 C \ell_1\right)$ | C |
| qqql_3132 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_1\right)\left(q_3 C \ell_2\right)$ | C |
| qqql_3133 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_1\right)\left(q_3 C \ell_3\right)$ | C |
| qqql_3231 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_2\right)\left(q_3 C \ell_1\right)$ | C |
| qqql_3232 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_2\right)\left(q_3 C \ell_2\right)$ | C |
| qqql_3233 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_2\right)\left(q_3 C \ell_3\right)$ | C |
| qqql_3331 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_3\right)\left(q_3 C \ell_1\right)$ | C |
| qqql_3332 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_3\right)\left(q_3 C \ell_2\right)$ | C |
| qqql_3333 | $\epsilon_{il}\epsilon_{jk}\left(q_3 C q_3\right)\left(q_3 C \ell_3\right)$ | C |
| duue_1111 | $\left(d_1 C u_1\right)\left(u_1 C e_1\right)$ | C |
| duue_1112 | $\left(d_1 C u_1\right)\left(u_1 C e_2\right)$ | C |
| duue_1113 | $\left(d_1 C u_1\right)\left(u_1 C e_3\right)$ | C |
| duue_1121 | $\left(d_1 C u_1\right)\left(u_2 C e_1\right)$ | C |
| duue_1122 | $\left(d_1 C u_1\right)\left(u_2 C e_2\right)$ | C |
| duue_1123 | $\left(d_1 C u_1\right)\left(u_2 C e_3\right)$ | C |
| duue_1131 | $\left(d_1 C u_1\right)\left(u_3 C e_1\right)$ | C |
| duue_1132 | $\left(d_1 C u_1\right)\left(u_3 C e_2\right)$ | C |
| duue_1133 | $\left(d_1 C u_1\right)\left(u_3 C e_3\right)$ | C |
| duue_1211 | $\left(d_1 C u_2\right)\left(u_1 C e_1\right)$ | C |
| duue_1212 | $\left(d_1 C u_2\right)\left(u_1 C e_2\right)$ | C |
| duue_1213 | $\left(d_1 C u_2\right)\left(u_1 C e_3\right)$ | C |
| duue_1221 | $\left(d_1 C u_2\right)\left(u_2 C e_1\right)$ | C |
| duue_1222 | $\left(d_1 C u_2\right)\left(u_2 C e_2\right)$ | C |
| duue_1223 | $\left(d_1 C u_2\right)\left(u_2 C e_3\right)$ | C |
| duue_1231 | $\left(d_1 C u_2\right)\left(u_3 C e_1\right)$ | C |
| duue_1232 | $\left(d_1 C u_2\right)\left(u_3 C e_2\right)$ | C |
| duue_1233 | $\left(d_1 C u_2\right)\left(u_3 C e_3\right)$ | C |
| duue_1311 | $\left(d_1 C u_3\right)\left(u_1 C e_1\right)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| duue_1312 | $(d_1 C u_3)(u_1 C e_2)$ | C |
| duue_1313 | $(d_1 C u_3)(u_1 C e_3)$ | C |
| duue_1321 | $(d_1 C u_3)(u_2 C e_1)$ | C |
| duue_1322 | $(d_1 C u_3)(u_2 C e_2)$ | C |
| duue_1323 | $(d_1 C u_3)(u_2 C e_3)$ | C |
| duue_1331 | $(d_1 C u_3)(u_3 C e_1)$ | C |
| duue_1332 | $(d_1 C u_3)(u_3 C e_2)$ | C |
| duue_1333 | $(d_1 C u_3)(u_3 C e_3)$ | C |
| duue_2111 | $(d_2 C u_1)(u_1 C e_1)$ | C |
| duue_2112 | $(d_2 C u_1)(u_1 C e_2)$ | C |
| duue_2113 | $(d_2 C u_1)(u_1 C e_3)$ | C |
| duue_2121 | $(d_2 C u_1)(u_2 C e_1)$ | C |
| duue_2122 | $(d_2 C u_1)(u_2 C e_2)$ | C |
| duue_2123 | $(d_2 C u_1)(u_2 C e_3)$ | C |
| duue_2131 | $(d_2 C u_1)(u_3 C e_1)$ | C |
| duue_2132 | $(d_2 C u_1)(u_3 C e_2)$ | C |
| duue_2133 | $(d_2 C u_1)(u_3 C e_3)$ | C |
| duue_2211 | $(d_2 C u_2)(u_1 C e_1)$ | C |
| duue_2212 | $(d_2 C u_2)(u_1 C e_2)$ | C |
| duue_2213 | $(d_2 C u_2)(u_1 C e_3)$ | C |
| duue_2221 | $(d_2 C u_2)(u_2 C e_1)$ | C |
| duue_2222 | $(d_2 C u_2)(u_2 C e_2)$ | C |
| duue_2223 | $(d_2 C u_2)(u_2 C e_3)$ | C |
| duue_2231 | $(d_2 C u_2)(u_3 C e_1)$ | C |
| duue_2232 | $(d_2 C u_2)(u_3 C e_2)$ | C |
| duue_2233 | $(d_2 C u_2)(u_3 C e_3)$ | C |
| duue_2311 | $(d_2 C u_3)(u_1 C e_1)$ | C |
| duue_2312 | $(d_2 C u_3)(u_1 C e_2)$ | C |
| duue_2313 | $(d_2 C u_3)(u_1 C e_3)$ | C |
| duue_2321 | $(d_2 C u_3)(u_2 C e_1)$ | C |
| duue_2322 | $(d_2 C u_3)(u_2 C e_2)$ | C |
| duue_2323 | $(d_2 C u_3)(u_2 C e_3)$ | C |
| duue_2331 | $(d_2 C u_3)(u_3 C e_1)$ | C |
| duue_2332 | $(d_2 C u_3)(u_3 C e_2)$ | C |
| duue_2333 | $(d_2 C u_3)(u_3 C e_3)$ | C |
| duue_3111 | $(d_3 C u_1)(u_1 C e_1)$ | C |
| duue_3112 | $(d_3 C u_1)(u_1 C e_2)$ | C |
| duue_3113 | $(d_3 C u_1)(u_1 C e_3)$ | C |
| duue_3121 | $(d_3 C u_1)(u_2 C e_1)$ | C |
| duue_3122 | $(d_3 C u_1)(u_2 C e_2)$ | C |
| duue_3123 | $(d_3 C u_1)(u_2 C e_3)$ | C |
| duue_3131 | $(d_3 C u_1)(u_3 C e_1)$ | C |
| duue_3132 | $(d_3 C u_1)(u_3 C e_2)$ | C |
| duue_3133 | $(d_3 C u_1)(u_3 C e_3)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| duue_3211 | $(d_3 C u_2)(u_1 C e_1)$ | C |
| duue_3212 | $(d_3 C u_2)(u_1 C e_2)$ | C |
| duue_3213 | $(d_3 C u_2)(u_1 C e_3)$ | C |
| duue_3221 | $(d_3 C u_2)(u_2 C e_1)$ | C |
| duue_3222 | $(d_3 C u_2)(u_2 C e_2)$ | C |
| duue_3223 | $(d_3 C u_2)(u_2 C e_3)$ | C |
| duue_3231 | $(d_3 C u_2)(u_3 C e_1)$ | C |
| duue_3232 | $(d_3 C u_2)(u_3 C e_2)$ | C |
| duue_3233 | $(d_3 C u_2)(u_3 C e_3)$ | C |
| duue_3311 | $(d_3 C u_3)(u_1 C e_1)$ | C |
| duue_3312 | $(d_3 C u_3)(u_1 C e_2)$ | C |
| duue_3313 | $(d_3 C u_3)(u_1 C e_3)$ | C |
| duue_3321 | $(d_3 C u_3)(u_2 C e_1)$ | C |
| duue_3322 | $(d_3 C u_3)(u_2 C e_2)$ | C |
| duue_3323 | $(d_3 C u_3)(u_2 C e_3)$ | C |
| duue_3331 | $(d_3 C u_3)(u_3 C e_1)$ | C |
| duue_3332 | $(d_3 C u_3)(u_3 C e_2)$ | C |
| duue_3333 | $(d_3 C u_3)(u_3 C e_3)$ | C |

dL=2

| WC name | Operator | Type |
| --- | --- | --- |
| llphiphi_11 | $\left(\widetilde{\varphi}^\dagger \ell_1\right)^T C \left(\widetilde{\varphi}^\dagger \ell_1\right)$ | C |
| llphiphi_22 | $\left(\widetilde{\varphi}^\dagger \ell_2\right)^T C \left(\widetilde{\varphi}^\dagger \ell_2\right)$ | C |
| llphiphi_33 | $\left(\widetilde{\varphi}^\dagger \ell_3\right)^T C \left(\widetilde{\varphi}^\dagger \ell_3\right)$ | C |

# Basis `AFGV` (**EFT** `WET`)

Basis suggested by Aebischer, Fael, Grueb, and Virto (arXiv:1704.06639). Neutrinos are in the flavor basis.

## Sectors

`sbsb`

| WC name | Operator | Type |
|---------|----------|------|
| `1sbsb` | $4G_F/\sqrt{2}(\bar{s}\gamma_\mu P_L b)(\bar{s}\gamma^\mu P_L b)$ | C |
| `5sbsb` | $4G_F/\sqrt{2}(\bar{s}_\alpha P_L b_\beta)(\bar{s}_\beta P_R b_\alpha)$ | C |
| `2sbsb` | $4G_F/\sqrt{2}(\bar{s} P_L b)(\bar{s} P_L b)$ | C |
| `1psbsb` | $4G_F/\sqrt{2}(\bar{s}\gamma_\mu P_R b)(\bar{s}\gamma^\mu P_R b)$ | C |
| `3sbsb` | $4G_F/\sqrt{2}(\bar{s}_\alpha P_L b_\beta)(\bar{s}_\beta P_L b_\alpha)$ | C |
| `2psbsb` | $4G_F/\sqrt{2}(\bar{s} P_R b)(\bar{s} P_R b)$ | C |
| `4sbsb` | $4G_F/\sqrt{2}(\bar{s} P_L b)(\bar{s} P_R b)$ | C |
| `3psbsb` | $4G_F/\sqrt{2}(\bar{s}_\alpha P_R b_\beta)(\bar{s}_\beta P_R b_\alpha)$ | C |

`dbdb`

| WC name | Operator | Type |
|---------|----------|------|
| `1dbdb` | $4G_F/\sqrt{2}(\bar{d}\gamma_\mu P_L b)(\bar{d}\gamma^\mu P_L b)$ | C |
| `5dbdb` | $4G_F/\sqrt{2}(\bar{d}_\alpha P_L b_\beta)(\bar{d}_\beta P_R b_\alpha)$ | C |
| `2dbdb` | $4G_F/\sqrt{2}(\bar{d} P_L b)(\bar{d} P_L b)$ | C |
| `1pdbdb` | $4G_F/\sqrt{2}(\bar{d}\gamma_\mu P_R b)(\bar{d}\gamma^\mu P_R b)$ | C |
| `3dbdb` | $4G_F/\sqrt{2}(\bar{d}_\alpha P_L b_\beta)(\bar{d}_\beta P_L b_\alpha)$ | C |
| `2pdbdb` | $4G_F/\sqrt{2}(\bar{d} P_R b)(\bar{d} P_R b)$ | C |
| `4dbdb` | $4G_F/\sqrt{2}(\bar{d} P_L b)(\bar{d} P_R b)$ | C |
| `3pdbdb` | $4G_F/\sqrt{2}(\bar{d}_\alpha P_R b_\beta)(\bar{d}_\beta P_R b_\alpha)$ | C |

`ubenu`

| WC name | Operator | Type |
|---------|----------|------|
| `1ubee` | $4G_F/\sqrt{2}(\bar{u} P_R \gamma^\mu b)(\bar{e}\gamma_\mu \nu_e)$ | C |
| `5ubee` | $4G_F/\sqrt{2}(\bar{u} P_R b)(\bar{e}\nu_e)$ | C |
| `1pubee` | $4G_F/\sqrt{2}(\bar{u} P_L \gamma^\mu b)(\bar{e}\gamma_\mu \nu_e)$ | C |
| `5pubee` | $4G_F/\sqrt{2}(\bar{u} P_L b)(\bar{e}\nu_e)$ | C |
| `7pubee` | $4G_F/\sqrt{2}(\bar{u} P_L \sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu} \nu_e)$ | C |

| WC name | Operator | Type |
|---|---|---|
| 1ubemu | $4G_F/\sqrt{2}(\bar{u}P_R\gamma^\mu b)(\bar{e}\gamma_\mu\nu_\mu)$ | C |
| 5ubemu | $4G_F/\sqrt{2}(\bar{u}P_R b)(\bar{e}\nu_\mu)$ | C |
| 1pubemu | $4G_F/\sqrt{2}(\bar{u}P_L\gamma^\mu b)(\bar{e}\gamma_\mu\nu_\mu)$ | C |
| 5pubemu | $4G_F/\sqrt{2}(\bar{u}P_L b)(\bar{e}\nu_\mu)$ | C |
| 7pubemu | $4G_F/\sqrt{2}(\bar{u}P_L\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu}\nu_\mu)$ | C |
| 1ubetau | $4G_F/\sqrt{2}(\bar{u}P_R\gamma^\mu b)(\bar{e}\gamma_\mu\nu_\tau)$ | C |
| 5ubetau | $4G_F/\sqrt{2}(\bar{u}P_R b)(\bar{e}\nu_\tau)$ | C |
| 1pubetau | $4G_F/\sqrt{2}(\bar{u}P_L\gamma^\mu b)(\bar{e}\gamma_\mu\nu_\tau)$ | C |
| 5pubetau | $4G_F/\sqrt{2}(\bar{u}P_L b)(\bar{e}\nu_\tau)$ | C |
| 7pubetau | $4G_F/\sqrt{2}(\bar{u}P_L\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu}\nu_\tau)$ | C |

`ubmunu`

| WC name | Operator | Type |
|---|---|---|
| 1ubmue | $4G_F/\sqrt{2}(\bar{u}P_R\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_e)$ | C |
| 5ubmue | $4G_F/\sqrt{2}(\bar{u}P_R b)(\bar{\mu}\nu_e)$ | C |
| 1pubmue | $4G_F/\sqrt{2}(\bar{u}P_L\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_e)$ | C |
| 5pubmue | $4G_F/\sqrt{2}(\bar{u}P_L b)(\bar{\mu}\nu_e)$ | C |
| 7pubmue | $4G_F/\sqrt{2}(\bar{u}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\nu_e)$ | C |
| 1ubmumu | $4G_F/\sqrt{2}(\bar{u}P_R\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_\mu)$ | C |
| 5ubmumu | $4G_F/\sqrt{2}(\bar{u}P_R b)(\bar{\mu}\nu_\mu)$ | C |
| 1pubmumu | $4G_F/\sqrt{2}(\bar{u}P_L\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_\mu)$ | C |
| 5pubmumu | $4G_F/\sqrt{2}(\bar{u}P_L b)(\bar{\mu}\nu_\mu)$ | C |
| 7pubmumu | $4G_F/\sqrt{2}(\bar{u}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\nu_\mu)$ | C |
| 1ubmutau | $4G_F/\sqrt{2}(\bar{u}P_R\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_\tau)$ | C |
| 5ubmutau | $4G_F/\sqrt{2}(\bar{u}P_R b)(\bar{\mu}\nu_\tau)$ | C |
| 1pubmutau | $4G_F/\sqrt{2}(\bar{u}P_L\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_\tau)$ | C |
| 5pubmutau | $4G_F/\sqrt{2}(\bar{u}P_L b)(\bar{\mu}\nu_\tau)$ | C |
| 7pubmutau | $4G_F/\sqrt{2}(\bar{u}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\nu_\tau)$ | C |

`ubtaunu`

| WC name | Operator | Type |
|---|---|---|
| 1ubtaue | $4G_F/\sqrt{2}(\bar{u}P_R\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_e)$ | C |
| 5ubtaue | $4G_F/\sqrt{2}(\bar{u}P_R b)(\bar{\tau}\nu_e)$ | C |
| 1pubtaue | $4G_F/\sqrt{2}(\bar{u}P_L\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_e)$ | C |
| 5pubtaue | $4G_F/\sqrt{2}(\bar{u}P_L b)(\bar{\tau}\nu_e)$ | C |
| 7pubtaue | $4G_F/\sqrt{2}(\bar{u}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}\nu_e)$ | C |
| 1ubtaumu | $4G_F/\sqrt{2}(\bar{u}P_R\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_\mu)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| 5ubtaumu | $4G_F/\sqrt{2}(\bar{u}P_R b)(\bar{\tau}\nu_\mu)$ | C |
| 1pubtaumu | $4G_F/\sqrt{2}(\bar{u}P_L\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_\mu)$ | C |
| 5pubtaumu | $4G_F/\sqrt{2}(\bar{u}P_L b)(\bar{\tau}\nu_\mu)$ | C |
| 7pubtaumu | $4G_F/\sqrt{2}(\bar{u}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}\nu_\mu)$ | C |
| 1ubtautau | $4G_F/\sqrt{2}(\bar{u}P_R\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_\tau)$ | C |
| 5ubtautau | $4G_F/\sqrt{2}(\bar{u}P_R b)(\bar{\tau}\nu_\tau)$ | C |
| 1pubtautau | $4G_F/\sqrt{2}(\bar{u}P_L\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_\tau)$ | C |
| 5pubtautau | $4G_F/\sqrt{2}(\bar{u}P_L b)(\bar{\tau}\nu_\tau)$ | C |
| 7pubtautau | $4G_F/\sqrt{2}(\bar{u}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}\nu_\tau)$ | C |

**cbenu**

| WC name | Operator | Type |
| --- | --- | --- |
| 1cbee | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{e}\gamma_\mu\nu_e)$ | C |
| 5cbee | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{e}\nu_e)$ | C |
| 1pcbee | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{e}\gamma_\mu\nu_e)$ | C |
| 5pcbee | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{e}\nu_e)$ | C |
| 7pcbee | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu}\nu_e)$ | C |
| 1cbemu | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{e}\gamma_\mu\nu_\mu)$ | C |
| 5cbemu | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{e}\nu_\mu)$ | C |
| 1pcbemu | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{e}\gamma_\mu\nu_\mu)$ | C |
| 5pcbemu | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{e}\nu_\mu)$ | C |
| 7pcbemu | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu}\nu_\mu)$ | C |
| 1cbetau | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{e}\gamma_\mu\nu_\tau)$ | C |
| 5cbetau | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{e}\nu_\tau)$ | C |
| 1pcbetau | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{e}\gamma_\mu\nu_\tau)$ | C |
| 5pcbetau | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{e}\nu_\tau)$ | C |
| 7pcbetau | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu}\nu_\tau)$ | C |

**cbmunu**

| WC name | Operator | Type |
| --- | --- | --- |
| 1cbmue | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_e)$ | C |
| 5cbmue | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{\mu}\nu_e)$ | C |
| 1pcbmue | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_e)$ | C |
| 5pcbmue | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{\mu}\nu_e)$ | C |
| 7pcbmue | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\nu_e)$ | C |
| 1cbmumu | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_\mu)$ | C |
| 5cbmumu | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{\mu}\nu_\mu)$ | C |

| WC name | Operator | Type |
|---|---|---|
| `1pcbmumu` | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_\mu)$ | C |
| `5pcbmumu` | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{\mu}\nu_\mu)$ | C |
| `7pcbmumu` | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\nu_\mu)$ | C |
| `1cbmutau` | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_\tau)$ | C |
| `5cbmutau` | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{\mu}\nu_\tau)$ | C |
| `1pcbmutau` | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{\mu}\gamma_\mu\nu_\tau)$ | C |
| `5pcbmutau` | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{\mu}\nu_\tau)$ | C |
| `7pcbmutau` | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\nu_\tau)$ | C |

**`cbtaunu`**

| WC name | Operator | Type |
|---|---|---|
| `1cbtaue` | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_e)$ | C |
| `5cbtaue` | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{\tau}\nu_e)$ | C |
| `1pcbtaue` | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_e)$ | C |
| `5pcbtaue` | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{\tau}\nu_e)$ | C |
| `7pcbtaue` | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}\nu_e)$ | C |
| `1cbtaumu` | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_\mu)$ | C |
| `5cbtaumu` | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{\tau}\nu_\mu)$ | C |
| `1pcbtaumu` | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_\mu)$ | C |
| `5pcbtaumu` | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{\tau}\nu_\mu)$ | C |
| `7pcbtaumu` | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}\nu_\mu)$ | C |
| `1cbtautau` | $4G_F/\sqrt{2}(\bar{c}P_R\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_\tau)$ | C |
| `5cbtautau` | $4G_F/\sqrt{2}(\bar{c}P_R b)(\bar{\tau}\nu_\tau)$ | C |
| `1pcbtautau` | $4G_F/\sqrt{2}(\bar{c}P_L\gamma^\mu b)(\bar{\tau}\gamma_\mu\nu_\tau)$ | C |
| `5pcbtautau` | $4G_F/\sqrt{2}(\bar{c}P_L b)(\bar{\tau}\nu_\tau)$ | C |
| `7pcbtautau` | $4G_F/\sqrt{2}(\bar{c}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}\nu_\tau)$ | C |

**`sbuc`**

| WC name | Operator | Type |
|---|---|---|
| `1sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{u}\gamma^\mu c)$ | C |
| `2sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu T^A b)(\bar{u}\gamma^\mu T^A c)$ | C |
| `3sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{u}\gamma^{\mu\nu\rho} c)$ | C |
| `4sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} T^A b)(\bar{u}\gamma^{\mu\nu\rho} T^A c)$ | C |
| `5sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{u}c)$ | C |
| `6sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R T^A b)(\bar{u}T^A c)$ | C |
| `7sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{u}\sigma_{\mu\nu} c)$ | C |
| `8sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} T^A b)(\bar{u}\sigma_{\mu\nu} T^A c)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| `9sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{u}\gamma^{\mu\nu\rho\sigma}c)$ | C |
| `10sbuc` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^Ac)$ | C |
| `1psbuc` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{u}\gamma^\mu c)$ | C |
| `2psbuc` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu T^Ab)(\bar{u}\gamma^\mu T^Ac)$ | C |
| `3psbuc` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho}b)(\bar{u}\gamma^{\mu\nu\rho}c)$ | C |
| `4psbuc` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho}T^Ab)(\bar{u}\gamma^{\mu\nu\rho}T^Ac)$ | C |
| `5psbuc` | $4G_F/\sqrt{2}(\bar{s}P_Lb)(\bar{u}c)$ | C |
| `6psbuc` | $4G_F/\sqrt{2}(\bar{s}P_LT^Ab)(\bar{u}T^Ac)$ | C |
| `7psbuc` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu}b)(\bar{u}\sigma_{\mu\nu}c)$ | C |
| `8psbuc` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu}T^Ab)(\bar{u}\sigma_{\mu\nu}T^Ac)$ | C |
| `9psbuc` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{u}\gamma^{\mu\nu\rho\sigma}c)$ | C |
| `10psbuc` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^Ac)$ | C |

`sbcu`

| WC name | Operator | Type |
|---------|----------|------|
| `1sbcu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{c}\gamma^\mu u)$ | C |
| `2sbcu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu T^Ab)(\bar{c}\gamma^\mu T^Au)$ | C |
| `3sbcu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)$ | C |
| `4sbcu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$ | C |
| `5sbcu` | $4G_F/\sqrt{2}(\bar{s}P_Rb)(\bar{c}u)$ | C |
| `6sbcu` | $4G_F/\sqrt{2}(\bar{s}P_RT^Ab)(\bar{c}T^Au)$ | C |
| `7sbcu` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}u)$ | C |
| `8sbcu` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$ | C |
| `9sbcu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$ | C |
| `10sbcu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Au)$ | C |
| `1psbcu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{c}\gamma^\mu u)$ | C |
| `2psbcu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu T^Ab)(\bar{c}\gamma^\mu T^Au)$ | C |
| `3psbcu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}u)$ | C |
| `4psbcu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$ | C |
| `5psbcu` | $4G_F/\sqrt{2}(\bar{s}P_Lb)(\bar{c}u)$ | C |
| `6psbcu` | $4G_F/\sqrt{2}(\bar{s}P_LT^Ab)(\bar{c}T^Au)$ | C |
| `7psbcu` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}u)$ | C |
| `8psbcu` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Au)$ | C |
| `9psbcu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$ | C |
| `10psbcu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Au)$ | C |

`dbuc`

| WC name | Operator | Type |
|---------|----------|------|
| 1dbuc | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{u}\gamma^\mu c)$ | C |
| 2dbuc | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu T^A b)(\bar{u}\gamma^\mu T^A c)$ | C |
| 3dbuc | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho} b)(\bar{u}\gamma^{\mu\nu\rho} c)$ | C |
| 4dbuc | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho} T^A b)(\bar{u}\gamma^{\mu\nu\rho} T^A c)$ | C |
| 5dbuc | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{u}c)$ | C |
| 6dbuc | $4G_F/\sqrt{2}(\bar{d}P_R T^A b)(\bar{u}T^A c)$ | C |
| 7dbuc | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu} b)(\bar{u}\sigma_{\mu\nu} c)$ | C |
| 8dbuc | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu} T^A b)(\bar{u}\sigma_{\mu\nu} T^A c)$ | C |
| 9dbuc | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{u}\gamma^{\mu\nu\rho\sigma} c)$ | C |
| 10dbuc | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{u}\gamma^{\mu\nu\rho\sigma} T^A c)$ | C |
| 1pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{u}\gamma^\mu c)$ | C |
| 2pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu T^A b)(\bar{u}\gamma^\mu T^A c)$ | C |
| 3pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho} b)(\bar{u}\gamma^{\mu\nu\rho} c)$ | C |
| 4pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho} T^A b)(\bar{u}\gamma^{\mu\nu\rho} T^A c)$ | C |
| 5pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{u}c)$ | C |
| 6pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L T^A b)(\bar{u}T^A c)$ | C |
| 7pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu} b)(\bar{u}\sigma_{\mu\nu} c)$ | C |
| 8pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu} T^A b)(\bar{u}\sigma_{\mu\nu} T^A c)$ | C |
| 9pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{u}\gamma^{\mu\nu\rho\sigma} c)$ | C |
| 10pdbuc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{u}\gamma^{\mu\nu\rho\sigma} T^A c)$ | C |

**dbcu**

| WC name | Operator | Type |
|---------|----------|------|
| 1dbcu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{c}\gamma^\mu u)$ | C |
| 2dbcu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A u)$ | C |
| 3dbcu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho} b)(\bar{c}\gamma^{\mu\nu\rho} u)$ | C |
| 4dbcu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho} T^A b)(\bar{c}\gamma^{\mu\nu\rho} T^A u)$ | C |
| 5dbcu | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{c}u)$ | C |
| 6dbcu | $4G_F/\sqrt{2}(\bar{d}P_R T^A b)(\bar{c}T^A u)$ | C |
| 7dbcu | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu} b)(\bar{c}\sigma_{\mu\nu} u)$ | C |
| 8dbcu | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu} T^A b)(\bar{c}\sigma_{\mu\nu} T^A u)$ | C |
| 9dbcu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{c}\gamma^{\mu\nu\rho\sigma} u)$ | C |
| 10dbcu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{c}\gamma^{\mu\nu\rho\sigma} T^A u)$ | C |
| 1pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{c}\gamma^\mu u)$ | C |
| 2pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A u)$ | C |
| 3pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho} b)(\bar{c}\gamma^{\mu\nu\rho} u)$ | C |
| 4pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho} T^A b)(\bar{c}\gamma^{\mu\nu\rho} T^A u)$ | C |
| 5pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{c}u)$ | C |
| 6pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L T^A b)(\bar{c}T^A u)$ | C |
| 7pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu} b)(\bar{c}\sigma_{\mu\nu} u)$ | C |

| WC name | Operator | Type |
|---|---|---|
| 8pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}T^A b)(\bar{c}\sigma_{\mu\nu}T^A u)$ | C |
| 9pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$ | C |
| 10pdbcu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}T^A b)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^A u)$ | C |

**sbsd**

| WC name | Operator | Type |
|---|---|---|
| 1sbsd | $4G_F/\sqrt{2}(\bar{s}\gamma_\mu P_L b)(\bar{s}\gamma^\mu d)$ | C |
| 1psbsd | $4G_F/\sqrt{2}(\bar{s}\gamma_\mu P_R b)(\bar{s}\gamma^\mu d)$ | C |
| 3sbsd | $4G_F/\sqrt{2}(\bar{s}\gamma_{\mu\nu\rho} P_L b)(\bar{s}\gamma^{\mu\nu\rho} d)$ | C |
| 3psbsd | $4G_F/\sqrt{2}(\bar{s}\gamma_{\mu\nu\rho} P_R b)(\bar{s}\gamma^{\mu\nu\rho} d)$ | C |
| 5sbsd | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{s}d)$ | C |
| 5psbsd | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{s}d)$ | C |
| 7sbsd | $4G_F/\sqrt{2}(\bar{s}\sigma^{\mu\nu} P_L b)(\bar{s}\sigma_{\mu\nu} d)$ | C |
| 7psbsd | $4G_F/\sqrt{2}(\bar{s}\sigma^{\mu\nu} P_R b)(\bar{s}\sigma_{\mu\nu} d)$ | C |
| 9sbsd | $4G_F/\sqrt{2}(\bar{s}\gamma_{\mu\nu\rho\sigma} P_L b)(\bar{s}\gamma^{\mu\nu\rho\sigma} d)$ | C |
| 9psbsd | $4G_F/\sqrt{2}(\bar{s}\gamma_{\mu\nu\rho\sigma} P_R b)(\bar{s}\gamma^{\mu\nu\rho\sigma} d)$ | C |

**dbds**

| WC name | Operator | Type |
|---|---|---|
| 1dbds | $4G_F/\sqrt{2}(\bar{d}\gamma_\mu P_L b)(\bar{d}\gamma^\mu s)$ | C |
| 1pdbds | $4G_F/\sqrt{2}(\bar{d}\gamma_\mu P_R b)(\bar{d}\gamma^\mu s)$ | C |
| 3dbds | $4G_F/\sqrt{2}(\bar{d}\gamma_{\mu\nu\rho} P_L b)(\bar{d}\gamma^{\mu\nu\rho} s)$ | C |
| 3pdbds | $4G_F/\sqrt{2}(\bar{d}\gamma_{\mu\nu\rho} P_R b)(\bar{d}\gamma^{\mu\nu\rho} s)$ | C |
| 5dbds | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{d}s)$ | C |
| 5pdbds | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{d}s)$ | C |
| 7dbds | $4G_F/\sqrt{2}(\bar{d}\sigma^{\mu\nu} P_L b)(\bar{d}\sigma_{\mu\nu} s)$ | C |
| 7pdbds | $4G_F/\sqrt{2}(\bar{d}\sigma^{\mu\nu} P_R b)(\bar{d}\sigma_{\mu\nu} s)$ | C |
| 9dbds | $4G_F/\sqrt{2}(\bar{d}\gamma_{\mu\nu\rho\sigma} P_L b)(\bar{d}\gamma^{\mu\nu\rho\sigma} s)$ | C |
| 9pdbds | $4G_F/\sqrt{2}(\bar{d}\gamma_{\mu\nu\rho\sigma} P_R b)(\bar{d}\gamma^{\mu\nu\rho\sigma} s)$ | C |

**sb**

| WC name | Operator | Type |
|---|---|---|
| 7gammas | $4G_F/\sqrt{2}\frac{e}{g_s^2}m_b(\bar{s}P_R\sigma_{\mu\nu}b)F^{\mu\nu}$ | C |
| 8gs | $4G_F/\sqrt{2}\frac{1}{g_s}m_b(\bar{s}P_R\sigma_{\mu\nu}T^A b)G_A^{\mu\nu}$ | C |

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| WC name | Operator | Type |
| --- | --- | --- |
| 7pgammas | $4G_F/\sqrt{2}\frac{e}{g_s^2}m_b(\bar{s}P_L\sigma_{\mu\nu}b)F^{\mu\nu}$ | C |
| 8pgs | $4G_F/\sqrt{2}\frac{1}{g_s}m_b(\bar{s}P_L\sigma_{\mu\nu}T^Ab)G_A^{\mu\nu}$ | C |
| 1sbuu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{u}\gamma^\mu u)$ | C |
| 2sbuu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu T^A b)(\bar{u}\gamma^\mu T^A u)$ | C |
| 3sbuu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{u}\gamma^{\mu\nu\rho} u)$ | C |
| 4sbuu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} T^A b)(\bar{u}\gamma^{\mu\nu\rho} T^A u)$ | C |
| 5sbuu | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{u}u)$ | C |
| 6sbuu | $4G_F/\sqrt{2}(\bar{s}P_R T^A b)(\bar{u}T^A u)$ | C |
| 7sbuu | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{u}\sigma_{\mu\nu} u)$ | C |
| 8sbuu | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} T^A b)(\bar{u}\sigma_{\mu\nu} T^A u)$ | C |
| 9sbuu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{u}\gamma^{\mu\nu\rho\sigma} u)$ | C |
| 10sbuu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{u}\gamma^{\mu\nu\rho\sigma} T^A u)$ | C |
| 1psbuu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{u}\gamma^\mu u)$ | C |
| 2psbuu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu T^A b)(\bar{u}\gamma^\mu T^A u)$ | C |
| 3psbuu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{u}\gamma^{\mu\nu\rho} u)$ | C |
| 4psbuu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} T^A b)(\bar{u}\gamma^{\mu\nu\rho} T^A u)$ | C |
| 5psbuu | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{u}u)$ | C |
| 6psbuu | $4G_F/\sqrt{2}(\bar{s}P_L T^A b)(\bar{u}T^A u)$ | C |
| 7psbuu | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{u}\sigma_{\mu\nu} u)$ | C |
| 8psbuu | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} T^A b)(\bar{u}\sigma_{\mu\nu} T^A u)$ | C |
| 9psbuu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{u}\gamma^{\mu\nu\rho\sigma} u)$ | C |
| 10psbuu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{u}\gamma^{\mu\nu\rho\sigma} T^A u)$ | C |
| 1sbdd | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{d}\gamma^\mu d)$ | C |
| 2sbdd | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu T^A b)(\bar{d}\gamma^\mu T^A d)$ | C |
| 3sbdd | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{d}\gamma^{\mu\nu\rho} d)$ | C |
| 4sbdd | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} T^A b)(\bar{d}\gamma^{\mu\nu\rho} T^A d)$ | C |
| 5sbdd | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{d}d)$ | C |
| 6sbdd | $4G_F/\sqrt{2}(\bar{s}P_R T^A b)(\bar{d}T^A d)$ | C |
| 7sbdd | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{d}\sigma_{\mu\nu} d)$ | C |
| 8sbdd | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} T^A b)(\bar{d}\sigma_{\mu\nu} T^A d)$ | C |
| 9sbdd | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{d}\gamma^{\mu\nu\rho\sigma} d)$ | C |
| 10sbdd | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{d}\gamma^{\mu\nu\rho\sigma} T^A d)$ | C |
| 1psbdd | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{d}\gamma^\mu d)$ | C |
| 2psbdd | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu T^A b)(\bar{d}\gamma^\mu T^A d)$ | C |
| 3psbdd | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{d}\gamma^{\mu\nu\rho} d)$ | C |
| 4psbdd | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} T^A b)(\bar{d}\gamma^{\mu\nu\rho} T^A d)$ | C |
| 5psbdd | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{d}d)$ | C |
| 6psbdd | $4G_F/\sqrt{2}(\bar{s}P_L T^A b)(\bar{d}T^A d)$ | C |
| 7psbdd | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{d}\sigma_{\mu\nu} d)$ | C |
| 8psbdd | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} T^A b)(\bar{d}\sigma_{\mu\nu} T^A d)$ | C |
| 9psbdd | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{d}\gamma^{\mu\nu\rho\sigma} d)$ | C |
| 10psbdd | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{d}\gamma^{\mu\nu\rho\sigma} T^A d)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| 1sbcc | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{c}\gamma^\mu c)$ | C |
| 2sbcc | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A c)$ | C |
| 3sbcc | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{c}\gamma^{\mu\nu\rho} c)$ | C |
| 4sbcc | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} T^A b)(\bar{c}\gamma^{\mu\nu\rho} T^A c)$ | C |
| 5sbcc | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{c}c)$ | C |
| 6sbcc | $4G_F/\sqrt{2}(\bar{s}P_R T^A b)(\bar{c}T^A c)$ | C |
| 7sbcc | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{c}\sigma_{\mu\nu} c)$ | C |
| 8sbcc | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} T^A b)(\bar{c}\sigma_{\mu\nu} T^A c)$ | C |
| 9sbcc | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{c}\gamma^{\mu\nu\rho\sigma} c)$ | C |
| 10sbcc | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{c}\gamma^{\mu\nu\rho\sigma} T^A c)$ | C |
| 1psbcc | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{c}\gamma^\mu c)$ | C |
| 2psbcc | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A c)$ | C |
| 3psbcc | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{c}\gamma^{\mu\nu\rho} c)$ | C |
| 4psbcc | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} T^A b)(\bar{c}\gamma^{\mu\nu\rho} T^A c)$ | C |
| 5psbcc | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{c}c)$ | C |
| 6psbcc | $4G_F/\sqrt{2}(\bar{s}P_L T^A b)(\bar{c}T^A c)$ | C |
| 7psbcc | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{c}\sigma_{\mu\nu} c)$ | C |
| 8psbcc | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} T^A b)(\bar{c}\sigma_{\mu\nu} T^A c)$ | C |
| 9psbcc | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{c}\gamma^{\mu\nu\rho\sigma} c)$ | C |
| 10psbcc | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} T^A b)(\bar{c}\gamma^{\mu\nu\rho\sigma} T^A c)$ | C |
| 1sbbb | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{b}\gamma^\mu b)$ | C |
| 3sbbb | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{b}\gamma^{\mu\nu\rho} b)$ | C |
| 5sbbb | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{b}b)$ | C |
| 7sbbb | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{b}\sigma_{\mu\nu} b)$ | C |
| 9sbbb | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{b}\gamma^{\mu\nu\rho\sigma} b)$ | C |
| 1psbbb | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{b}\gamma^\mu b)$ | C |
| 3psbbb | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{b}\gamma^{\mu\nu\rho} b)$ | C |
| 5psbbb | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{b}b)$ | C |
| 7psbbb | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{b}\sigma_{\mu\nu} b)$ | C |
| 9psbbb | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{b}\gamma^{\mu\nu\rho\sigma} b)$ | C |
| 1sbss | $4G_F/\sqrt{2}(\bar{s}\gamma_\mu P_L b)(\bar{s}\gamma^\mu s)$ | C |
| 1psbss | $4G_F/\sqrt{2}(\bar{s}\gamma_\mu P_R b)(\bar{s}\gamma^\mu s)$ | C |
| 3sbss | $4G_F/\sqrt{2}(\bar{s}\gamma_{\mu\nu\rho} P_L b)(\bar{s}\gamma^{\mu\nu\rho} s)$ | C |
| 3psbss | $4G_F/\sqrt{2}(\bar{s}\gamma_{\mu\nu\rho} P_R b)(\bar{s}\gamma^{\mu\nu\rho} s)$ | C |
| 5sbss | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{s}s)$ | C |
| 5psbss | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{s}s)$ | C |
| 7sbss | $4G_F/\sqrt{2}(\bar{s}\sigma^{\mu\nu} P_L b)(\bar{s}\sigma_{\mu\nu} s)$ | C |
| 7psbss | $4G_F/\sqrt{2}(\bar{s}\sigma^{\mu\nu} P_R b)(\bar{s}\sigma_{\mu\nu} s)$ | C |
| 9sbss | $4G_F/\sqrt{2}(\bar{s}\gamma_{\mu\nu\rho\sigma} P_L b)(\bar{s}\gamma^{\mu\nu\rho\sigma} s)$ | C |
| 9psbss | $4G_F/\sqrt{2}(\bar{s}\gamma_{\mu\nu\rho\sigma} P_R b)(\bar{s}\gamma^{\mu\nu\rho\sigma} s)$ | C |
| 1sbee | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{e}\gamma^\mu e)$ | C |
| 1psbee | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{e}\gamma^\mu e)$ | C |

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| WC name | Operator | Type |
|---|---|---|
| `3sbee` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho}b)(\bar{e}\gamma^{\mu\nu\rho}e)$ | C |
| `3psbee` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho}b)(\bar{e}\gamma^{\mu\nu\rho}e)$ | C |
| `5sbee` | $4G_F/\sqrt{2}(\bar{s}P_Rb)(\bar{e}e)$ | C |
| `5psbee` | $4G_F/\sqrt{2}(\bar{s}P_Lb)(\bar{e}e)$ | C |
| `7sbee` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}e)$ | C |
| `7psbee` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}e)$ | C |
| `9sbee` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}e)$ | C |
| `9psbee` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}e)$ | C |
| `1sbmumu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\mu}\gamma^\mu\mu)$ | C |
| `1psbmumu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\mu}\gamma^\mu\mu)$ | C |
| `3sbmumu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho}b)(\bar{\mu}\gamma^{\mu\nu\rho}\mu)$ | C |
| `3psbmumu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho}b)(\bar{\mu}\gamma^{\mu\nu\rho}\mu)$ | C |
| `5sbmumu` | $4G_F/\sqrt{2}(\bar{s}P_Rb)(\bar{\mu}\mu)$ | C |
| `5psbmumu` | $4G_F/\sqrt{2}(\bar{s}P_Lb)(\bar{\mu}\mu)$ | C |
| `7sbmumu` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\mu)$ | C |
| `7psbmumu` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\mu)$ | C |
| `9sbmumu` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\mu)$ | C |
| `9psbmumu` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\mu)$ | C |
| `1sbtautau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\tau}\gamma^\mu\tau)$ | C |
| `1psbtautau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\tau}\gamma^\mu\tau)$ | C |
| `3sbtautau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho}b)(\bar{\tau}\gamma^{\mu\nu\rho}\tau)$ | C |
| `3psbtautau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho}b)(\bar{\tau}\gamma^{\mu\nu\rho}\tau)$ | C |
| `5sbtautau` | $4G_F/\sqrt{2}(\bar{s}P_Rb)(\bar{\tau}\tau)$ | C |
| `5psbtautau` | $4G_F/\sqrt{2}(\bar{s}P_Lb)(\bar{\tau}\tau)$ | C |
| `7sbtautau` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu}b)(\bar{\tau}\sigma_{\mu\nu}\tau)$ | C |
| `7psbtautau` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu}b)(\bar{\tau}\sigma_{\mu\nu}\tau)$ | C |
| `9sbtautau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |
| `9psbtautau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |

`db`

| WC name | Operator | Type |
|---|---|---|
| `7gammad` | $4G_F/\sqrt{2}\frac{e}{g_s^2}m_b(\bar{d}P_R\sigma_{\mu\nu}b)F^{\mu\nu}$ | C |
| `8gd` | $4G_F/\sqrt{2}\frac{1}{g_s}m_b(\bar{d}P_R\sigma_{\mu\nu}T^Ab)G_A^{\mu\nu}$ | C |
| `7pgammad` | $4G_F/\sqrt{2}\frac{e}{g_s^2}m_b(\bar{d}P_L\sigma_{\mu\nu}b)F^{\mu\nu}$ | C |
| `8pgd` | $4G_F/\sqrt{2}\frac{1}{g_s}m_b(\bar{d}P_L\sigma_{\mu\nu}T^Ab)G_A^{\mu\nu}$ | C |
| `1dbuu` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{u}\gamma^\mu u)$ | C |
| `2dbuu` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu T^Ab)(\bar{u}\gamma^\mu T^Au)$ | C |
| `3dbuu` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{u}\gamma^{\mu\nu\rho}u)$ | C |
| `4dbuu` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho}T^Ab)(\bar{u}\gamma^{\mu\nu\rho}T^Au)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| 5dbuu | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{u}u)$ | C |
| 6dbuu | $4G_F/\sqrt{2}(\bar{d}P_R T^A b)(\bar{u}T^A u)$ | C |
| 7dbuu | $4G_F/\sqrt{2}(\bar{d}P_R \sigma^{\mu\nu} b)(\bar{u}\sigma_{\mu\nu} u)$ | C |
| 8dbuu | $4G_F/\sqrt{2}(\bar{d}P_R \sigma^{\mu\nu} T^A b)(\bar{u}\sigma_{\mu\nu} T^A u)$ | C |
| 9dbuu | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_{\mu\nu\rho\sigma} b)(\bar{u}\gamma^{\mu\nu\rho\sigma} u)$ | C |
| 10dbuu | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_{\mu\nu\rho\sigma} T^A b)(\bar{u}\gamma^{\mu\nu\rho\sigma} T^A u)$ | C |
| 1pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_\mu b)(\bar{u}\gamma^\mu u)$ | C |
| 2pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_\mu T^A b)(\bar{u}\gamma^\mu T^A u)$ | C |
| 3pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_{\mu\nu\rho} b)(\bar{u}\gamma^{\mu\nu\rho} u)$ | C |
| 4pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_{\mu\nu\rho} T^A b)(\bar{u}\gamma^{\mu\nu\rho} T^A u)$ | C |
| 5pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{u}u)$ | C |
| 6pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L T^A b)(\bar{u}T^A u)$ | C |
| 7pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L \sigma^{\mu\nu} b)(\bar{u}\sigma_{\mu\nu} u)$ | C |
| 8pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L \sigma^{\mu\nu} T^A b)(\bar{u}\sigma_{\mu\nu} T^A u)$ | C |
| 9pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_{\mu\nu\rho\sigma} b)(\bar{u}\gamma^{\mu\nu\rho\sigma} u)$ | C |
| 10pdbuu | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_{\mu\nu\rho\sigma} T^A b)(\bar{u}\gamma^{\mu\nu\rho\sigma} T^A u)$ | C |
| 1dbdd | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_\mu b)(\bar{d}\gamma^\mu d)$ | C |
| 2dbdd | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_\mu T^A b)(\bar{d}\gamma^\mu T^A d)$ | C |
| 3dbdd | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_{\mu\nu\rho} b)(\bar{d}\gamma^{\mu\nu\rho} d)$ | C |
| 4dbdd | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_{\mu\nu\rho} T^A b)(\bar{d}\gamma^{\mu\nu\rho} T^A d)$ | C |
| 5dbdd | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{d}d)$ | C |
| 6dbdd | $4G_F/\sqrt{2}(\bar{d}P_R T^A b)(\bar{d}T^A d)$ | C |
| 7dbdd | $4G_F/\sqrt{2}(\bar{d}P_R \sigma^{\mu\nu} b)(\bar{d}\sigma_{\mu\nu} d)$ | C |
| 8dbdd | $4G_F/\sqrt{2}(\bar{d}P_R \sigma^{\mu\nu} T^A b)(\bar{d}\sigma_{\mu\nu} T^A d)$ | C |
| 9dbdd | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_{\mu\nu\rho\sigma} b)(\bar{d}\gamma^{\mu\nu\rho\sigma} d)$ | C |
| 10dbdd | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_{\mu\nu\rho\sigma} T^A b)(\bar{d}\gamma^{\mu\nu\rho\sigma} T^A d)$ | C |
| 1pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_\mu b)(\bar{d}\gamma^\mu d)$ | C |
| 2pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_\mu T^A b)(\bar{d}\gamma^\mu T^A d)$ | C |
| 3pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_{\mu\nu\rho} b)(\bar{d}\gamma^{\mu\nu\rho} d)$ | C |
| 4pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_{\mu\nu\rho} T^A b)(\bar{d}\gamma^{\mu\nu\rho} T^A d)$ | C |
| 5pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{d}d)$ | C |
| 6pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L T^A b)(\bar{d}T^A d)$ | C |
| 7pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L \sigma^{\mu\nu} b)(\bar{d}\sigma_{\mu\nu} d)$ | C |
| 8pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L \sigma^{\mu\nu} T^A b)(\bar{d}\sigma_{\mu\nu} T^A d)$ | C |
| 9pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_{\mu\nu\rho\sigma} b)(\bar{d}\gamma^{\mu\nu\rho\sigma} d)$ | C |
| 10pdbdd | $4G_F/\sqrt{2}(\bar{d}P_L \gamma_{\mu\nu\rho\sigma} T^A b)(\bar{d}\gamma^{\mu\nu\rho\sigma} T^A d)$ | C |
| 1dbcc | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_\mu b)(\bar{c}\gamma^\mu c)$ | C |
| 2dbcc | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_\mu T^A b)(\bar{c}\gamma^\mu T^A c)$ | C |
| 3dbcc | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_{\mu\nu\rho} b)(\bar{c}\gamma^{\mu\nu\rho} c)$ | C |
| 4dbcc | $4G_F/\sqrt{2}(\bar{d}P_R \gamma_{\mu\nu\rho} T^A b)(\bar{c}\gamma^{\mu\nu\rho} T^A c)$ | C |
| 5dbcc | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{c}c)$ | C |
| 6dbcc | $4G_F/\sqrt{2}(\bar{d}P_R T^A b)(\bar{c}T^A c)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| 7dbcc | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}c)$ | C |
| 8dbcc | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Ac)$ | C |
| 9dbcc | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}c)$ | C |
| 10dbcc | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Ac)$ | C |
| 1pdbcc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{c}\gamma^\mu c)$ | C |
| 2pdbcc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu T^Ab)(\bar{c}\gamma^\mu T^Ac)$ | C |
| 3pdbcc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{c}\gamma^{\mu\nu\rho}c)$ | C |
| 4pdbcc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho}T^Ab)(\bar{c}\gamma^{\mu\nu\rho}T^Ac)$ | C |
| 5pdbcc | $4G_F/\sqrt{2}(\bar{d}P_Lb)(\bar{c}c)$ | C |
| 6pdbcc | $4G_F/\sqrt{2}(\bar{d}P_LT^Ab)(\bar{c}T^Ac)$ | C |
| 7pdbcc | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}b)(\bar{c}\sigma_{\mu\nu}c)$ | C |
| 8pdbcc | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}T^Ab)(\bar{c}\sigma_{\mu\nu}T^Ac)$ | C |
| 9pdbcc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{c}\gamma^{\mu\nu\rho\sigma}c)$ | C |
| 10pdbcc | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}T^Ab)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Ac)$ | C |
| 1dbbb | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{b}\gamma^\mu b)$ | C |
| 3dbbb | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{b}\gamma^{\mu\nu\rho}b)$ | C |
| 5dbbb | $4G_F/\sqrt{2}(\bar{d}P_Rb)(\bar{b}b)$ | C |
| 7dbbb | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu}b)(\bar{b}\sigma_{\mu\nu}b)$ | C |
| 9dbbb | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{b}\gamma^{\mu\nu\rho\sigma}b)$ | C |
| 1pdbbb | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{b}\gamma^\mu b)$ | C |
| 3pdbbb | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{b}\gamma^{\mu\nu\rho}b)$ | C |
| 5pdbbb | $4G_F/\sqrt{2}(\bar{d}P_Lb)(\bar{b}b)$ | C |
| 7pdbbb | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}b)(\bar{b}\sigma_{\mu\nu}b)$ | C |
| 9pdbbb | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{b}\gamma^{\mu\nu\rho\sigma}b)$ | C |
| 1dbss | $4G_F/\sqrt{2}(\bar{d}\gamma_\mu P_Lb)(\bar{s}\gamma^\mu s)$ | C |
| 1pdbss | $4G_F/\sqrt{2}(\bar{d}\gamma_\mu P_Rb)(\bar{s}\gamma^\mu s)$ | C |
| 3dbss | $4G_F/\sqrt{2}(\bar{d}\gamma_{\mu\nu\rho} P_Lb)(\bar{s}\gamma^{\mu\nu\rho} s)$ | C |
| 3pdbss | $4G_F/\sqrt{2}(\bar{d}\gamma_{\mu\nu\rho} P_Rb)(\bar{s}\gamma^{\mu\nu\rho} s)$ | C |
| 5dbss | $4G_F/\sqrt{2}(\bar{d}P_Lb)(\bar{s}s)$ | C |
| 5pdbss | $4G_F/\sqrt{2}(\bar{d}P_Rb)(\bar{s}s)$ | C |
| 7dbss | $4G_F/\sqrt{2}(\bar{d}\sigma^{\mu\nu} P_Lb)(\bar{s}\sigma_{\mu\nu}s)$ | C |
| 7pdbss | $4G_F/\sqrt{2}(\bar{d}\sigma^{\mu\nu} P_Rb)(\bar{s}\sigma_{\mu\nu}s)$ | C |
| 9dbss | $4G_F/\sqrt{2}(\bar{d}\gamma_{\mu\nu\rho\sigma} P_Lb)(\bar{s}\gamma^{\mu\nu\rho\sigma} s)$ | C |
| 9pdbss | $4G_F/\sqrt{2}(\bar{d}\gamma_{\mu\nu\rho\sigma} P_Rb)(\bar{s}\gamma^{\mu\nu\rho\sigma} s)$ | C |
| 1dbee | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{e}\gamma^\mu e)$ | C |
| 1pdbee | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{e}\gamma^\mu e)$ | C |
| 3dbee | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho} b)(\bar{e}\gamma^{\mu\nu\rho} e)$ | C |
| 3pdbee | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho} b)(\bar{e}\gamma^{\mu\nu\rho} e)$ | C |
| 5dbee | $4G_F/\sqrt{2}(\bar{d}P_Rb)(\bar{e}e)$ | C |
| 5pdbee | $4G_F/\sqrt{2}(\bar{d}P_Lb)(\bar{e}e)$ | C |
| 7dbee | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}e)$ | C |
| 7pdbee | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}e)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| 9dbee | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}e)$ | C |
| 9pdbee | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}e)$ | C |
| 1dbmumu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu}b)(\bar{\mu}\gamma^{\mu}\mu)$ | C |
| 1pdbmumu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu}b)(\bar{\mu}\gamma^{\mu}\mu)$ | C |
| 3dbmumu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{\mu}\gamma^{\mu\nu\rho}\mu)$ | C |
| 3pdbmumu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{\mu}\gamma^{\mu\nu\rho}\mu)$ | C |
| 5dbmumu | $4G_F/\sqrt{2}(\bar{d}P_Rb)(\bar{\mu}\mu)$ | C |
| 5pdbmumu | $4G_F/\sqrt{2}(\bar{d}P_Lb)(\bar{\mu}\mu)$ | C |
| 7dbmumu | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\mu)$ | C |
| 7pdbmumu | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\mu)$ | C |
| 9dbmumu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\mu)$ | C |
| 9pdbmumu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\mu)$ | C |
| 1dbtautau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu}b)(\bar{\tau}\gamma^{\mu}\tau)$ | C |
| 1pdbtautau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu}b)(\bar{\tau}\gamma^{\mu}\tau)$ | C |
| 3dbtautau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{\tau}\gamma^{\mu\nu\rho}\tau)$ | C |
| 3pdbtautau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{\tau}\gamma^{\mu\nu\rho}\tau)$ | C |
| 5dbtautau | $4G_F/\sqrt{2}(\bar{d}P_Rb)(\bar{\tau}\tau)$ | C |
| 5pdbtautau | $4G_F/\sqrt{2}(\bar{d}P_Lb)(\bar{\tau}\tau)$ | C |
| 7dbtautau | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu}b)(\bar{\tau}\sigma_{\mu\nu}\tau)$ | C |
| 7pdbtautau | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}b)(\bar{\tau}\sigma_{\mu\nu}\tau)$ | C |
| 9dbtautau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |
| 9pdbtautau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |

**sbemu**

| WC name | Operator | Type |
| --- | --- | --- |
| 1sbemu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu}b)(\bar{e}\gamma^{\mu}\mu)$ | C |
| 1psbemu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu}b)(\bar{e}\gamma^{\mu}\mu)$ | C |
| 3sbemu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho}b)(\bar{e}\gamma^{\mu\nu\rho}\mu)$ | C |
| 3psbemu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho}b)(\bar{e}\gamma^{\mu\nu\rho}\mu)$ | C |
| 5sbemu | $4G_F/\sqrt{2}(\bar{s}P_Rb)(\bar{e}\mu)$ | C |
| 5psbemu | $4G_F/\sqrt{2}(\bar{s}P_Lb)(\bar{e}\mu)$ | C |
| 7sbemu | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}\mu)$ | C |
| 7psbemu | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}\mu)$ | C |
| 9sbemu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu)$ | C |
| 9psbemu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu)$ | C |

**sbetau**

| WC name | Operator | Type |
|---|---|---|
| `1sbetau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{e}\gamma^\mu\tau)$ | C |
| `1psbetau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{e}\gamma^\mu\tau)$ | C |
| `3sbetau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{e}\gamma^{\mu\nu\rho}\tau)$ | C |
| `3psbetau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{e}\gamma^{\mu\nu\rho}\tau)$ | C |
| `5sbetau` | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{e}\tau)$ | C |
| `5psbetau` | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{e}\tau)$ | C |
| `7sbetau` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu}\tau)$ | C |
| `7psbetau` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu}\tau)$ | C |
| `9sbetau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{e}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |
| `9psbetau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{e}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |

**`sbmue`**

| WC name | Operator | Type |
|---|---|---|
| `1sbmue` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\mu}\gamma^\mu e)$ | C |
| `1psbmue` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\mu}\gamma^\mu e)$ | C |
| `3sbmue` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{\mu}\gamma^{\mu\nu\rho} e)$ | C |
| `3psbmue` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{\mu}\gamma^{\mu\nu\rho} e)$ | C |
| `5sbmue` | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{\mu}e)$ | C |
| `5psbmue` | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{\mu}e)$ | C |
| `7sbmue` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}e)$ | C |
| `7psbmue` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}e)$ | C |
| `9sbmue` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e)$ | C |
| `9psbmue` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e)$ | C |

**`sbmutau`**

| WC name | Operator | Type |
|---|---|---|
| `1sbmutau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\mu}\gamma^\mu\tau)$ | C |
| `1psbmutau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\mu}\gamma^\mu\tau)$ | C |
| `3sbmutau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{\mu}\gamma^{\mu\nu\rho}\tau)$ | C |
| `3psbmutau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{\mu}\gamma^{\mu\nu\rho}\tau)$ | C |
| `5sbmutau` | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{\mu}\tau)$ | C |
| `5psbmutau` | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{\mu}\tau)$ | C |
| `7sbmutau` | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\tau)$ | C |
| `7psbmutau` | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\tau)$ | C |
| `9sbmutau` | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |
| `9psbmutau` | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |

**sbtaue**

| WC name | Operator | Type |
|---------|----------|------|
| 1sbtaue | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\tau}\gamma^\mu e)$ | C |
| 1psbtaue | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\tau}\gamma^\mu e)$ | C |
| 3sbtaue | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{\tau}\gamma^{\mu\nu\rho} e)$ | C |
| 3psbtaue | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{\tau}\gamma^{\mu\nu\rho} e)$ | C |
| 5sbtaue | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{\tau} e)$ | C |
| 5psbtaue | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{\tau} e)$ | C |
| 7sbtaue | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu} e)$ | C |
| 7psbtaue | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu} e)$ | C |
| 9sbtaue | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma} e)$ | C |
| 9psbtaue | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma} e)$ | C |

**sbtaumu**

| WC name | Operator | Type |
|---------|----------|------|
| 1sbtaumu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\tau}\gamma^\mu \mu)$ | C |
| 1psbtaumu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\tau}\gamma^\mu \mu)$ | C |
| 3sbtaumu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho} b)(\bar{\tau}\gamma^{\mu\nu\rho} \mu)$ | C |
| 3psbtaumu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho} b)(\bar{\tau}\gamma^{\mu\nu\rho} \mu)$ | C |
| 5sbtaumu | $4G_F/\sqrt{2}(\bar{s}P_R b)(\bar{\tau} \mu)$ | C |
| 5psbtaumu | $4G_F/\sqrt{2}(\bar{s}P_L b)(\bar{\tau} \mu)$ | C |
| 7sbtaumu | $4G_F/\sqrt{2}(\bar{s}P_R\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu} \mu)$ | C |
| 7psbtaumu | $4G_F/\sqrt{2}(\bar{s}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu} \mu)$ | C |
| 9sbtaumu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma} \mu)$ | C |
| 9psbtaumu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma} \mu)$ | C |

**dbemu**

| WC name | Operator | Type |
|---------|----------|------|
| 1dbemu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{e}\gamma^\mu \mu)$ | C |
| 1pdbemu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{e}\gamma^\mu \mu)$ | C |
| 3dbemu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho} b)(\bar{e}\gamma^{\mu\nu\rho} \mu)$ | C |
| 3pdbemu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho} b)(\bar{e}\gamma^{\mu\nu\rho} \mu)$ | C |
| 5dbemu | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{e} \mu)$ | C |
| 5pdbemu | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{e} \mu)$ | C |
| 7dbemu | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu} \mu)$ | C |
| 7pdbemu | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu} b)(\bar{e}\sigma_{\mu\nu} \mu)$ | C |
| 9dbemu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{e}\gamma^{\mu\nu\rho\sigma} \mu)$ | C |

| WC name | Operator | Type |
|---|---|---|
| 9pdbemu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu)$ | C |

**dbetau**

| WC name | Operator | Type |
|---|---|---|
| 1dbetau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu}b)(\bar{e}\gamma^{\mu}\tau)$ | C |
| 1pdbetau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu}b)(\bar{e}\gamma^{\mu}\tau)$ | C |
| 3dbetau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{e}\gamma^{\mu\nu\rho}\tau)$ | C |
| 3pdbetau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{e}\gamma^{\mu\nu\rho}\tau)$ | C |
| 5dbetau | $4G_F/\sqrt{2}(\bar{d}P_Rb)(\bar{e}\tau)$ | C |
| 5pdbetau | $4G_F/\sqrt{2}(\bar{d}P_Lb)(\bar{e}\tau)$ | C |
| 7dbetau | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}\tau)$ | C |
| 7pdbetau | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}b)(\bar{e}\sigma_{\mu\nu}\tau)$ | C |
| 9dbetau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |
| 9pdbetau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{e}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |

**dbmue**

| WC name | Operator | Type |
|---|---|---|
| 1dbmue | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu}b)(\bar{\mu}\gamma^{\mu}e)$ | C |
| 1pdbmue | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu}b)(\bar{\mu}\gamma^{\mu}e)$ | C |
| 3dbmue | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{\mu}\gamma^{\mu\nu\rho}e)$ | C |
| 3pdbmue | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{\mu}\gamma^{\mu\nu\rho}e)$ | C |
| 5dbmue | $4G_F/\sqrt{2}(\bar{d}P_Rb)(\bar{\mu}e)$ | C |
| 5pdbmue | $4G_F/\sqrt{2}(\bar{d}P_Lb)(\bar{\mu}e)$ | C |
| 7dbmue | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}e)$ | C |
| 7pdbmue | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}e)$ | C |
| 9dbmue | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e)$ | C |
| 9pdbmue | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e)$ | C |

**dbmutau**

| WC name | Operator | Type |
|---|---|---|
| 1dbmutau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu}b)(\bar{\mu}\gamma^{\mu}\tau)$ | C |
| 1pdbmutau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu}b)(\bar{\mu}\gamma^{\mu}\tau)$ | C |
| 3dbmutau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho}b)(\bar{\mu}\gamma^{\mu\nu\rho}\tau)$ | C |
| 3pdbmutau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho}b)(\bar{\mu}\gamma^{\mu\nu\rho}\tau)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| `5dbmutau` | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{\mu}\tau)$ | C |
| `5pdbmutau` | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{\mu}\tau)$ | C |
| `7dbmutau` | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\tau)$ | C |
| `7pdbmutau` | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu} b)(\bar{\mu}\sigma_{\mu\nu}\tau)$ | C |
| `9dbmutau` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |
| `9pdbmutau` | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\tau)$ | C |

**`dbtaue`**

| WC name | Operator | Type |
| --- | --- | --- |
| `1dbtaue` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\tau}\gamma^\mu e)$ | C |
| `1pdbtaue` | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\tau}\gamma^\mu e)$ | C |
| `3dbtaue` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho} b)(\bar{\tau}\gamma^{\mu\nu\rho} e)$ | C |
| `3pdbtaue` | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho} b)(\bar{\tau}\gamma^{\mu\nu\rho} e)$ | C |
| `5dbtaue` | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{\tau}e)$ | C |
| `5pdbtaue` | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{\tau}e)$ | C |
| `7dbtaue` | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}e)$ | C |
| `7pdbtaue` | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}e)$ | C |
| `9dbtaue` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma} e)$ | C |
| `9pdbtaue` | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma} e)$ | C |

**`dbtaumu`**

| WC name | Operator | Type |
| --- | --- | --- |
| `1dbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\tau}\gamma^\mu \mu)$ | C |
| `1pdbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\tau}\gamma^\mu \mu)$ | C |
| `3dbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho} b)(\bar{\tau}\gamma^{\mu\nu\rho} \mu)$ | C |
| `3pdbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho} b)(\bar{\tau}\gamma^{\mu\nu\rho} \mu)$ | C |
| `5dbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_R b)(\bar{\tau}\mu)$ | C |
| `5pdbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_L b)(\bar{\tau}\mu)$ | C |
| `7dbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_R\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}\mu)$ | C |
| `7pdbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_L\sigma^{\mu\nu} b)(\bar{\tau}\sigma_{\mu\nu}\mu)$ | C |
| `9dbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma} b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma} \mu)$ | C |
| `9pdbtaumu` | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma} b)(\bar{\tau}\gamma^{\mu\nu\rho\sigma} \mu)$ | C |

**`sbnunu`**

| WC name | Operator | Type |
|---|---|---|
| Lsbee | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_e)$ | C |
| Rsbee | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_e)$ | C |
| Lsbmumu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_\mu)$ | C |
| Rsbmumu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_\mu)$ | C |
| Lsbtautau | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_\tau)$ | C |
| Rsbtautau | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_\tau)$ | C |
| Lsbemu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_\mu)$ | C |
| Rsbemu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_\mu)$ | C |
| Lsbmue | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_e)$ | C |
| Rsbmue | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_e)$ | C |
| Lsbetau | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_\tau)$ | C |
| Rsbetau | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_\tau)$ | C |
| Lsbtaue | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_e)$ | C |
| Rsbtaue | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_e)$ | C |
| Lsbtaumu | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_\mu)$ | C |
| Rsbtaumu | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_\mu)$ | C |
| Lsbmutau | $4G_F/\sqrt{2}(\bar{s}P_R\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_\tau)$ | C |
| Rsbmutau | $4G_F/\sqrt{2}(\bar{s}P_L\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_\tau)$ | C |

**dbnunu**

| WC name | Operator | Type |
|---|---|---|
| Ldbee | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_e)$ | C |
| Rdbee | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_e)$ | C |
| Ldbmumu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_\mu)$ | C |
| Rdbmumu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_\mu)$ | C |
| Ldbtautau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_\tau)$ | C |
| Rdbtautau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_\tau)$ | C |
| Ldbemu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_\mu)$ | C |
| Rdbemu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_\mu)$ | C |
| Ldbmue | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_e)$ | C |
| Rdbmue | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_e)$ | C |
| Ldbetau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_\tau)$ | C |
| Rdbetau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_e\gamma^\mu\nu_\tau)$ | C |
| Ldbtaue | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_e)$ | C |
| Rdbtaue | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_e)$ | C |
| Ldbtaumu | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_\mu)$ | C |
| Rdbtaumu | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_\tau\gamma^\mu\nu_\mu)$ | C |
| Ldbmutau | $4G_F/\sqrt{2}(\bar{d}P_R\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_\tau)$ | C |
| Rdbmutau | $4G_F/\sqrt{2}(\bar{d}P_L\gamma_\mu b)(\bar{\nu}_\mu\gamma^\mu\nu_\tau)$ | C |

# Basis `EOS` (EFT `WET`)

## Sectors

`sb`

| WC name | Operator | Type |
|---------|----------|------|
| `b->s::c1` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*(\bar{s}_L\gamma^\mu T^a c_L)(\bar{c}_L\gamma_\mu T^a b_L)$ | C |
| `b->s::c2` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*(\bar{s}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu b_L)$ | C |
| `b->s::c3` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*(\bar{s}_L\gamma^\mu b_L)\sum_q(\bar{q}\gamma_\mu q)$ | C |
| `b->s::c4` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*(\bar{s}_L\gamma^\mu T^a b_L)\sum_q(\bar{q}\gamma_\mu T^a q)$ | C |
| `b->s::c5` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*(\bar{s}_L\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3}b_L)\sum_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3}q)$ | C |
| `b->s::c6` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*(\bar{s}_L\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3}T^a b_L)\sum_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3}T^a q)$ | C |
| `b->s::c7` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e}{16\pi^2}m_b(\bar{s}_L\sigma_{\mu\nu}b_R)F^{\mu\nu}$ | C |
| `b->s::c7'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e}{16\pi^2}m_b(\bar{s}_R\sigma_{\mu\nu}b_L)F^{\mu\nu}$ | C |
| `b->s::c8` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{g_s}{16\pi^2}m_b(\bar{s}_L\sigma_{\mu\nu}T^a b_R)G^{a\mu\nu}$ | C |
| `b->s::c8'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{g_s}{16\pi^2}m_b(\bar{s}_R\sigma_{\mu\nu}T^a b_L)G^{a\mu\nu}$ | C |
| `b->see::c9` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu e)$ | C |
| `b->see::c9'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu e)$ | C |
| `b->see::c10` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu\gamma_5 e)$ | C |
| `b->see::c10'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu\gamma_5 e)$ | C |
| `b->see::cS` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}e)$ | C |
| `b->see::cS'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{e}e)$ | C |
| `b->see::cP` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}\gamma_5 e)$ | C |
| `b->see::cP'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{e}\gamma_5 e)$ | C |
| `b->smumu::c9` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\mu)$ | C |
| `b->smumu::c9'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\mu)$ | C |
| `b->smumu::c10` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\gamma_5\mu)$ | C |
| `b->smumu::c10'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\gamma_5\mu)$ | C |
| `b->smumu::cS` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\mu}\mu)$ | C |
| `b->smumu::cS'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{\mu}\mu)$ | C |
| `b->smumu::cP` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\mu}\gamma_5\mu)$ | C |
| `b->smumu::cP'` | $4G_F/\sqrt{2}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{\mu}\gamma_5\mu)$ | C |
| `b->smumu::cT` | $4G_F/\sqrt{2}V_{ub}\frac{e^2}{16\pi^2}(\bar{s}\sigma_{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\mu)$ | C |
| `b->smumu::cT5` | $4G_F/\sqrt{2}V_{ub}\frac{e^2}{16\pi^2}(\bar{s}\sigma_{\mu\nu}b)(\bar{\mu}\sigma_{\mu\nu}\gamma_5\mu)$ | C |

`ubenu`

| WC name | Operator | Type |
|---|---|---|
| `b->uenue::cVL` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu\nu_{eL})$ | C |
| `b->uenue::cVR` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{eL})$ | C |
| `b->uenue::cSR` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_L b_R)(\bar{e}_R\nu_{eL})$ | C |
| `b->uenue::cSL` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_R b_L)(\bar{e}_R\nu_{eL})$ | C |
| `b->uenue::cT` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_R\sigma^{\mu\nu} b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{eL})$ | C |

`ubmunu`

| WC name | Operator | Type |
|---|---|---|
| `b->umunumu::cVL` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$ | C |
| `b->umunumu::cVR` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$ | C |
| `b->umunumu::cSR` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_L b_R)(\bar{\mu}_R\nu_{\mu L})$ | C |
| `b->umunumu::cSL` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_R b_L)(\bar{\mu}_R\nu_{\mu L})$ | C |
| `b->umunumu::cT` | $-4G_F/\sqrt{2}V_{ub}(\bar{u}_R\sigma^{\mu\nu} b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\mu L})$ | C |

# Basis `flavio` (EFT `WET`)

## Sectors

`sbsb`

| WC name | Operator | Type |
| --- | --- | --- |
| `CVLL_bsbs` | $(\bar{s}_L\gamma^\mu b_L)(\bar{s}_L\gamma_\mu b_L)$ | C |
| `CVRR_bsbs` | $(\bar{s}_R\gamma^\mu b_R)(\bar{s}_R\gamma_\mu b_R)$ | C |
| `CSLL_bsbs` | $(\bar{s}_R b_L)(\bar{s}_R b_L)$ | C |
| `CSRR_bsbs` | $(\bar{s}_L b_R)(\bar{s}_L b_R)$ | C |
| `CTLL_bsbs` | $(\bar{s}_R\sigma^{\mu\nu} b_L)(\bar{s}_R\sigma_{\mu\nu} b_L)$ | C |
| `CTRR_bsbs` | $(\bar{s}_L\sigma^{\mu\nu} b_R)(\bar{s}_L\sigma_{\mu\nu} b_R)$ | C |
| `CVLR_bsbs` | $(\bar{s}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| `CSLR_bsbs` | $(\bar{s}_R b_L)(\bar{s}_L b_R)$ | C |

`dbdb`

| WC name | Operator | Type |
| --- | --- | --- |
| `CVLL_bdbd` | $(\bar{d}_L\gamma^\mu b_L)(\bar{d}_L\gamma_\mu b_L)$ | C |
| `CVRR_bdbd` | $(\bar{d}_R\gamma^\mu b_R)(\bar{d}_R\gamma_\mu b_R)$ | C |
| `CSLL_bdbd` | $(\bar{d}_R b_L)(\bar{d}_R b_L)$ | C |
| `CSRR_bdbd` | $(\bar{d}_L b_R)(\bar{d}_L b_R)$ | C |
| `CTLL_bdbd` | $(\bar{d}_R\sigma^{\mu\nu} b_L)(\bar{d}_R\sigma_{\mu\nu} b_L)$ | C |
| `CTRR_bdbd` | $(\bar{d}_L\sigma^{\mu\nu} b_R)(\bar{d}_L\sigma_{\mu\nu} b_R)$ | C |
| `CVLR_bdbd` | $(\bar{d}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| `CSLR_bdbd` | $(\bar{d}_R b_L)(\bar{d}_L b_R)$ | C |

`sdsd`

| WC name | Operator | Type |
| --- | --- | --- |
| `CVLL_sdsd` | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_L\gamma_\mu s_L)$ | C |
| `CVRR_sdsd` | $(\bar{d}_R\gamma^\mu s_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| `CSLL_sdsd` | $(\bar{d}_R s_L)(\bar{d}_R s_L)$ | C |
| `CSRR_sdsd` | $(\bar{d}_L s_R)(\bar{d}_L s_R)$ | C |
| `CTLL_sdsd` | $(\bar{d}_R\sigma^{\mu\nu} s_L)(\bar{d}_R\sigma_{\mu\nu} s_L)$ | C |
| `CTRR_sdsd` | $(\bar{d}_L\sigma^{\mu\nu} s_R)(\bar{d}_L\sigma_{\mu\nu} s_R)$ | C |
| `CVLR_sdsd` | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| `CSLR_sdsd` | $(\bar{d}_R s_L)(\bar{d}_L s_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| C1_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu T^a c_L)(\bar{c}_L \gamma_\mu T^a b_L)$ | C |
| C1p_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^\mu T^a c_R)(\bar{c}_R \gamma_\mu T^a b_R)$ | C |
| C2_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu c_L)(\bar{c}_L \gamma_\mu b_L)$ | C |
| C2p_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^\mu c_R)(\bar{c}_R \gamma_\mu b_R)$ | C |
| C3_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu b_L) \sum_q (\bar{q} \gamma_\mu q)$ | C |
| C3p_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^\mu b_R) \sum_q (\bar{q} \gamma_\mu q)$ | C |
| C4_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu T^a b_L) \sum_q (\bar{q} \gamma_\mu T^a q)$ | C |
| C4p_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^\mu T^a b_R) \sum_q (\bar{q} \gamma_\mu T^a q)$ | C |
| C5_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} b_L) \sum_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} q)$ | C |
| C5p_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} b_R) \sum_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} q)$ | C |
| C6_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} T^a b_L) \sum_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} T^a q)$ | C |
| C6p_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} T^a b_R) \sum_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} T^a q)$ | C |
| C3Q_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu b_L) \sum_q Q_q (\bar{q} \gamma_\mu q)$ | C |
| C3Qp_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^\mu b_R) \sum_q Q_q (\bar{q} \gamma_\mu q)$ | C |
| C4Q_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^\mu T^a b_L) \sum_q Q_q (\bar{q} \gamma_\mu T^a q)$ | C |
| C4Qp_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^\mu T^a b_R) \sum_q Q_q (\bar{q} \gamma_\mu T^a q)$ | C |
| C5Q_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} b_L) \sum_q Q_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} q)$ | C |
| C5Qp_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} b_R) \sum_q Q_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} q)$ | C |
| C6Q_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_L \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} T^a b_L) \sum_q Q_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} T^a q)$ | C |
| C6Qp_bs | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* (\bar{s}_R \gamma^{\mu_1} \gamma^{\mu_2} \gamma^{\mu_3} T^a b_R) \sum_q Q_q (\bar{q} \gamma_{\mu_1} \gamma_{\mu_2} \gamma_{\mu_3} T^a q)$ | C |
| C9_bsee | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{e} \gamma_\mu e)$ | C |
| C9p_bsee | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{e} \gamma_\mu e)$ | C |
| C10_bsee | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{e} \gamma_\mu \gamma_5 e)$ | C |
| C10p_bsee | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{e} \gamma_\mu \gamma_5 e)$ | C |
| CS_bsee | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R)(\bar{e} e)$ | C |
| CSp_bsee | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L)(\bar{e} e)$ | C |
| CP_bsee | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R)(\bar{e} \gamma_5 e)$ | C |
| CPp_bsee | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L)(\bar{e} \gamma_5 e)$ | C |
| C9_bsmumu | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\mu} \gamma_\mu \mu)$ | C |
| C9p_bsmumu | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\mu} \gamma_\mu \mu)$ | C |
| C10_bsmumu | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\mu} \gamma_\mu \gamma_5 \mu)$ | C |
| C10p_bsmumu | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\mu} \gamma_\mu \gamma_5 \mu)$ | C |
| CS_bsmumu | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R)(\bar{\mu} \mu)$ | C |
| CSp_bsmumu | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L)(\bar{\mu} \mu)$ | C |

| WC name | Operator | Type |
|---|---|---|
| `CP_bsmumu` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R)(\bar{\mu}\gamma_5\mu)$ | C |
| `CPp_bsmumu` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L)(\bar{\mu}\gamma_5\mu)$ | C |
| `C9_bstautau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\tau}\gamma_\mu\tau)$ | C |
| `C9p_bstautau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\tau}\gamma_\mu\tau)$ | C |
| `C10_bstautau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\tau}\gamma_\mu\gamma_5\tau)$ | C |
| `C10p_bstautau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\tau}\gamma_\mu\gamma_5\tau)$ | C |
| `CS_bstautau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R)(\bar{\tau}\tau)$ | C |
| `CSp_bstautau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L)(\bar{\tau}\tau)$ | C |
| `CP_bstautau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_L b_R)(\bar{\tau}\gamma_5\tau)$ | C |
| `CPp_bstautau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} m_b (\bar{s}_R b_L)(\bar{\tau}\gamma_5\tau)$ | C |
| `C7_bs` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_L \sigma^{\mu\nu} b_R)(F_{\mu\nu})$ | C |
| `C7p_bs` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e}{16\pi^2} m_b (\bar{s}_R \sigma^{\mu\nu} b_L)(F_{\mu\nu})$ | C |
| `C8_bs` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{g_s}{16\pi^2} m_b (\bar{s}_L \sigma^{\mu\nu} T^a b_R)(G^a_{\mu\nu})$ | C |
| `C8p_bs` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{g_s}{16\pi^2} m_b (\bar{s}_R \sigma^{\mu\nu} T^a b_L)(G^a_{\mu\nu})$ | C |

**sbnunu**

| WC name | Operator | Type |
|---|---|---|
| `CL_bsnuenue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_e \gamma_\mu (1-\gamma_5)\nu_e)$ | C |
| `CL_bsnumunumu` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_\mu \gamma_\mu (1-\gamma_5)\nu_\mu)$ | C |
| `CL_bsnutaunutau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_\tau \gamma_\mu (1-\gamma_5)\nu_\tau)$ | C |
| `CL_bsnuenumu` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_\mu \gamma_\mu (1-\gamma_5)\nu_e)$ | C |
| `CL_bsnumunue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_e \gamma_\mu (1-\gamma_5)\nu_\mu)$ | C |
| `CL_bsnumunutau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_\tau \gamma_\mu (1-\gamma_5)\nu_\mu)$ | C |
| `CL_bsnutaunumu` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_\mu \gamma_\mu (1-\gamma_5)\nu_\tau)$ | C |
| `CL_bsnuenutau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_\tau \gamma_\mu (1-\gamma_5)\nu_e)$ | C |
| `CL_bsnutaunue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_L \gamma^\mu b_L)(\bar{\nu}_e \gamma_\mu (1-\gamma_5)\nu_\tau)$ | C |
| `CR_bsnuenue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\nu}_e \gamma_\mu (1-\gamma_5)\nu_e)$ | C |
| `CR_bsnumunumu` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\nu}_\mu \gamma_\mu (1-\gamma_5)\nu_\mu)$ | C |
| `CR_bsnutaunutau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\nu}_\tau \gamma_\mu (1-\gamma_5)\nu_\tau)$ | C |
| `CR_bsnuenumu` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\nu}_\mu \gamma_\mu (1-\gamma_5)\nu_e)$ | C |
| `CR_bsnumunue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\nu}_e \gamma_\mu (1-\gamma_5)\nu_\mu)$ | C |
| `CR_bsnumunutau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\nu}_\tau \gamma_\mu (1-\gamma_5)\nu_\mu)$ | C |
| `CR_bsnutaunumu` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{ts}^* \frac{e^2}{16\pi^2} (\bar{s}_R \gamma^\mu b_R)(\bar{\nu}_\mu \gamma_\mu (1-\gamma_5)\nu_\tau)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| `CR_bsnuenutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\nu}_\tau\gamma_\mu(1-\gamma_5)\nu_e)$ | C |
| `CR_bsnutaunue` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\nu}_e\gamma_\mu(1-\gamma_5)\nu_\tau)$ | C |

`db`

| WC name | Operator | Type |
|---------|----------|------|
| `C1_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^\mu T^a c_L)(\bar{c}_L\gamma_\mu T^a b_L)$ | C |
| `C1p_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^\mu T^a c_R)(\bar{c}_R\gamma_\mu T^a b_R)$ | C |
| `C2_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu b_L)$ | C |
| `C2p_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^\mu c_R)(\bar{c}_R\gamma_\mu b_R)$ | C |
| `C3_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^\mu b_L)\sum_q(\bar{q}\gamma_\mu q)$ | C |
| `C3p_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^\mu b_R)\sum_q(\bar{q}\gamma_\mu q)$ | C |
| `C4_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^\mu T^a b_L)\sum_q(\bar{q}\gamma_\mu T^a q)$ | C |
| `C4p_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^\mu T^a b_R)\sum_q(\bar{q}\gamma_\mu T^a q)$ | C |
| `C5_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3} b_L)\sum_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3} q)$ | C |
| `C5p_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3} b_R)\sum_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3} q)$ | C |
| `C6_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3} T^a b_L)\sum_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3} T^a q)$ | C |
| `C6p_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3} T^a b_R)\sum_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3} T^a q)$ | C |
| `C3Q_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^\mu b_L)\sum_q Q_q(\bar{q}\gamma_\mu q)$ | C |
| `C3Qp_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^\mu b_R)\sum_q Q_q(\bar{q}\gamma_\mu q)$ | C |
| `C4Q_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^\mu T^a b_L)\sum_q Q_q(\bar{q}\gamma_\mu T^a q)$ | C |
| `C4Qp_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^\mu T^a b_R)\sum_q Q_q(\bar{q}\gamma_\mu T^a q)$ | C |
| `C5Q_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3} b_L)\sum_q Q_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3} q)$ | C |
| `C5Qp_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3} b_R)\sum_q Q_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3} q)$ | C |
| `C6Q_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_L\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3} T^a b_L)\sum_q Q_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3} T^a q)$ | C |
| `C6Qp_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*(\bar{d}_R\gamma^{\mu_1}\gamma^{\mu_2}\gamma^{\mu_3} T^a b_R)\sum_q Q_q(\bar{q}\gamma_{\mu_1}\gamma_{\mu_2}\gamma_{\mu_3} T^a q)$ | C |
| `C9_bdee` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu e)$ | C |
| `C9p_bdee` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu e)$ | C |
| `C10_bdee` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu\gamma_5 e)$ | C |
| `C10p_bdee` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu\gamma_5 e)$ | C |
| `CS_bdee` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{e}e)$ | C |
| `CSp_bdee` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{e}e)$ | C |
| `CP_bdee` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{e}\gamma_5 e)$ | C |
| `CPp_bdee` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{e}\gamma_5 e)$ | C |
| `C9_bdmumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\mu)$ | C |

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| WC name | Operator | Type |
|---|---|---|
| `C9p_bdmumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\mu)$ | C |
| `C10_bdmumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\gamma_5\mu)$ | C |
| `C10p_bdmumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\gamma_5\mu)$ | C |
| `CS_bdmumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{\mu}\mu)$ | C |
| `CSp_bdmumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{\mu}\mu)$ | C |
| `CP_bdmumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{\mu}\gamma_5\mu)$ | C |
| `CPp_bdmumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{\mu}\gamma_5\mu)$ | C |
| `C9_bdtautau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\tau}\gamma_\mu\tau)$ | C |
| `C9p_bdtautau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\tau}\gamma_\mu\tau)$ | C |
| `C10_bdtautau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\tau}\gamma_\mu\gamma_5\tau)$ | C |
| `C10p_bdtautau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\tau}\gamma_\mu\gamma_5\tau)$ | C |
| `CS_bdtautau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{\tau}\tau)$ | C |
| `CSp_bdtautau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{\tau}\tau)$ | C |
| `CP_bdtautau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{\tau}\gamma_5\tau)$ | C |
| `CPp_bdtautau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{\tau}\gamma_5\tau)$ | C |
| `C7_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e}{16\pi^2}m_b(\bar{d}_L\sigma^{\mu\nu}b_R)(F_{\mu\nu})$ | C |
| `C7p_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e}{16\pi^2}m_b(\bar{d}_R\sigma^{\mu\nu}b_L)(F_{\mu\nu})$ | C |
| `C8_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{g_s}{16\pi^2}m_b(\bar{d}_L\sigma^{\mu\nu}T^a b_R)(G^a_{\mu\nu})$ | C |
| `C8p_bd` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{g_s}{16\pi^2}m_b(\bar{d}_R\sigma^{\mu\nu}T^a b_L)(G^a_{\mu\nu})$ | C |

**`dbnunu`**

| WC name | Operator | Type |
|---|---|---|
| `CL_bdnuenue` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_e\gamma_\mu(1-\gamma_5)\nu_e)$ | C |
| `CL_bdnumunumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_\mu)$ | C |
| `CL_bdnutaunutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_\tau\gamma_\mu(1-\gamma_5)\nu_\tau)$ | C |
| `CL_bdnuenumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_e)$ | C |
| `CL_bdnumunue` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_e\gamma_\mu(1-\gamma_5)\nu_\mu)$ | C |
| `CL_bdnumunutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_\tau\gamma_\mu(1-\gamma_5)\nu_\mu)$ | C |
| `CL_bdnutaunumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_\tau)$ | C |
| `CL_bdnuenutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_\tau\gamma_\mu(1-\gamma_5)\nu_e)$ | C |
| `CL_bdnutaunue` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\nu}_e\gamma_\mu(1-\gamma_5)\nu_\tau)$ | C |
| `CR_bdnuenue` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_e\gamma_\mu(1-\gamma_5)\nu_e)$ | C |
| `CR_bdnumunumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_\mu)$ | C |

| WC name | Operator | Type |
|---|---|---|
| CR_bdnutaunutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_\tau\gamma_\mu(1-\gamma_5)\nu_\tau)$ | C |
| CR_bdnuenumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_e)$ | C |
| CR_bdnumunue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_e\gamma_\mu(1-\gamma_5)\nu_\mu)$ | C |
| CR_bdnumunutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_\tau\gamma_\mu(1-\gamma_5)\nu_\mu)$ | C |
| CR_bdnutaunumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_\mu\gamma_\mu(1-\gamma_5)\nu_\tau)$ | C |
| CR_bdnuenutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_\tau\gamma_\mu(1-\gamma_5)\nu_e)$ | C |
| CR_bdnutaunue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\nu}_e\gamma_\mu(1-\gamma_5)\nu_\tau)$ | C |

**sbemu**

| WC name | Operator | Type |
|---|---|---|
| C9_bsemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu e)$ | C |
| C9p_bsemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu e)$ | C |
| C10_bsemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\gamma_5 e)$ | C |
| C10p_bsemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\gamma_5 e)$ | C |
| CS_bsemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\mu}e)$ | C |
| CSp_bsemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{\mu}e)$ | C |
| CP_bsemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\mu}\gamma_5 e)$ | C |
| CPp_bsemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{\mu}\gamma_5 e)$ | C |

**sbmue**

| WC name | Operator | Type |
|---|---|---|
| C9_bsmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu\mu)$ | C |
| C9p_bsmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu\mu)$ | C |
| C10_bsmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu\gamma_5\mu)$ | C |
| C10p_bsmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu\gamma_5\mu)$ | C |
| CS_bsmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}\mu)$ | C |
| CSp_bsmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{e}\mu)$ | C |
| CP_bsmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}\gamma_5\mu)$ | C |
| CPp_bsmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{e}\gamma_5\mu)$ | C |

**sbetau**

| WC name | Operator | Type |
|---------|----------|------|
| C9_bsetau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\tau}\gamma_\mu e)$ | C |
| C9p_bsetau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\tau}\gamma_\mu e)$ | C |
| C10_bsetau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\tau}\gamma_\mu\gamma_5 e)$ | C |
| C10p_bsetau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\tau}\gamma_\mu\gamma_5 e)$ | C |
| CS_bsetau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\tau}e)$ | C |
| CSp_bsetau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{\tau}e)$ | C |
| CP_bsetau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\tau}\gamma_5 e)$ | C |
| CPp_bsetau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{\tau}\gamma_5 e)$ | C |

**sbtaue**

| WC name | Operator | Type |
|---------|----------|------|
| C9_bstaue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu\tau)$ | C |
| C9p_bstaue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu\tau)$ | C |
| C10_bstaue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu\gamma_5\tau)$ | C |
| C10p_bstaue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu\gamma_5\tau)$ | C |
| CS_bstaue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}\tau)$ | C |
| CSp_bstaue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{e}\tau)$ | C |
| CP_bstaue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{e}\gamma_5\tau)$ | C |
| CPp_bstaue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{e}\gamma_5\tau)$ | C |

**sbmutau**

| WC name | Operator | Type |
|---------|----------|------|
| C9_bsmutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\tau}\gamma_\mu\mu)$ | C |
| C9p_bsmutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\tau}\gamma_\mu\mu)$ | C |
| C10_bsmutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\tau}\gamma_\mu\gamma_5\mu)$ | C |
| C10p_bsmutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\tau}\gamma_\mu\gamma_5\mu)$ | C |
| CS_bsmutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\tau}\mu)$ | C |
| CSp_bsmutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_R b_L)(\bar{\tau}\mu)$ | C |
| CP_bsmutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_L b_R)(\bar{\tau}\gamma_5\mu)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| CPp_bsmutau | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{\tau}\gamma_5\mu)$ | C |

**sbtaumu**

| WC name | Operator | Type |
| --- | --- | --- |
| C9_bstaumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\tau)$ | C |
| C9p_bstaumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\tau)$ | C |
| C10_bstaumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\gamma_5\tau)$ | C |
| C10p_bstaumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}(\bar{s}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\gamma_5\tau)$ | C |
| CS_bstaumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Lb_R)(\bar{\mu}\tau)$ | C |
| CSp_bstaumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{\mu}\tau)$ | C |
| CP_bstaumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Lb_R)(\bar{\mu}\gamma_5\tau)$ | C |
| CPp_bstaumu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{ts}^*\frac{e^2}{16\pi^2}m_b(\bar{s}_Rb_L)(\bar{\mu}\gamma_5\tau)$ | C |

**dbemu**

| WC name | Operator | Type |
| --- | --- | --- |
| C9_bdemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu e)$ | C |
| C9p_bdemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu e)$ | C |
| C10_bdemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\gamma_5 e)$ | C |
| C10p_bdemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\gamma_5 e)$ | C |
| CS_bdemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{\mu}e)$ | C |
| CSp_bdemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\mu}e)$ | C |
| CP_bdemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Lb_R)(\bar{\mu}\gamma_5 e)$ | C |
| CPp_bdemu | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_Rb_L)(\bar{\mu}\gamma_5 e)$ | C |

**dbmue**

| WC name | Operator | Type |
| --- | --- | --- |
| C9_bdmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu\mu)$ | C |
| C9p_bdmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{e}\gamma_\mu\mu)$ | C |
| C10_bdmue | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{e}\gamma_\mu\gamma_5\mu)$ | C |

| WC name | Operator | Type |
|---|---|---|
| `C10p_bdmue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_R \gamma^\mu b_R)(\bar{e}\gamma_\mu \gamma_5 \mu)$ | C |
| `CS_bdmue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_L b_R)(\bar{e}\mu)$ | C |
| `CSp_bdmue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_R b_L)(\bar{e}\mu)$ | C |
| `CP_bdmue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_L b_R)(\bar{e}\gamma_5 \mu)$ | C |
| `CPp_bdmue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_R b_L)(\bar{e}\gamma_5 \mu)$ | C |

**`dbetau`**

| WC name | Operator | Type |
|---|---|---|
| `C9_bdetau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_L \gamma^\mu b_L)(\bar{\tau}\gamma_\mu e)$ | C |
| `C9p_bdetau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_R \gamma^\mu b_R)(\bar{\tau}\gamma_\mu e)$ | C |
| `C10_bdetau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_L \gamma^\mu b_L)(\bar{\tau}\gamma_\mu \gamma_5 e)$ | C |
| `C10p_bdetau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_R \gamma^\mu b_R)(\bar{\tau}\gamma_\mu \gamma_5 e)$ | C |
| `CS_bdetau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_L b_R)(\bar{\tau}e)$ | C |
| `CSp_bdetau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_R b_L)(\bar{\tau}e)$ | C |
| `CP_bdetau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_L b_R)(\bar{\tau}\gamma_5 e)$ | C |
| `CPp_bdetau` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_R b_L)(\bar{\tau}\gamma_5 e)$ | C |

**`dbtaue`**

| WC name | Operator | Type |
|---|---|---|
| `C9_bdtaue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_L \gamma^\mu b_L)(\bar{e}\gamma_\mu \tau)$ | C |
| `C9p_bdtaue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_R \gamma^\mu b_R)(\bar{e}\gamma_\mu \tau)$ | C |
| `C10_bdtaue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_L \gamma^\mu b_L)(\bar{e}\gamma_\mu \gamma_5 \tau)$ | C |
| `C10p_bdtaue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} (\bar{d}_R \gamma^\mu b_R)(\bar{e}\gamma_\mu \gamma_5 \tau)$ | C |
| `CS_bdtaue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_L b_R)(\bar{e}\tau)$ | C |
| `CSp_bdtaue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_R b_L)(\bar{e}\tau)$ | C |
| `CP_bdtaue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_L b_R)(\bar{e}\gamma_5 \tau)$ | C |
| `CPp_bdtaue` | $\frac{4G_F}{\sqrt{2}} V_{tb} V_{td}^* \frac{e^2}{16\pi^2} m_b (\bar{d}_R b_L)(\bar{e}\gamma_5 \tau)$ | C |

**`dbmutau`**

| WC name | Operator | Type |
|---|---|---|
| `C9_bdmutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\tau}\gamma_\mu\mu)$ | C |
| `C9p_bdmutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\tau}\gamma_\mu\mu)$ | C |
| `C10_bdmutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\tau}\gamma_\mu\gamma_5\mu)$ | C |
| `C10p_bdmutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\tau}\gamma_\mu\gamma_5\mu)$ | C |
| `CS_bdmutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{\tau}\mu)$ | C |
| `CSp_bdmutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{\tau}\mu)$ | C |
| `CP_bdmutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{\tau}\gamma_5\mu)$ | C |
| `CPp_bdmutau` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{\tau}\gamma_5\mu)$ | C |

**dbtaumu**

| WC name | Operator | Type |
|---|---|---|
| `C9_bdtaumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\tau)$ | C |
| `C9p_bdtaumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\tau)$ | C |
| `C10_bdtaumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}\gamma_\mu\gamma_5\tau)$ | C |
| `C10p_bdtaumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}\gamma_\mu\gamma_5\tau)$ | C |
| `CS_bdtaumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{\mu}\tau)$ | C |
| `CSp_bdtaumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{\mu}\tau)$ | C |
| `CP_bdtaumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_L b_R)(\bar{\mu}\gamma_5\tau)$ | C |
| `CPp_bdtaumu` | $\frac{4G_F}{\sqrt{2}}V_{tb}V_{td}^*\frac{e^2}{16\pi^2}m_b(\bar{d}_R b_L)(\bar{\mu}\gamma_5\tau)$ | C |

**cbenu**

| WC name | Operator | Type |
|---|---|---|
| `CV_bcenue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu\nu_{eL})$ | C |
| `CVp_bcenue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{eL})$ | C |
| `CS_bcenue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{e}_R\nu_{eL})$ | C |
| `CSp_bcenue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{e}_R\nu_{eL})$ | C |
| `CT_bcenue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu} b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{eL})$ | C |
| `CV_bcenumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CVp_bcenumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CS_bcenumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{e}_R\nu_{\mu L})$ | C |
| `CSp_bcenumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{e}_R\nu_{\mu L})$ | C |
| `CT_bcenumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu} b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\mu L})$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| `CV_bcenutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CVp_bcenutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CS_bcenutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{e}_R\nu_{\tau L})$ | C |
| `CSp_bcenutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{e}_R\nu_{\tau L})$ | C |
| `CT_bcenutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu} b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\tau L})$ | C |

`ubenu`

| WC name | Operator | Type |
|---------|----------|------|
| `CV_buenue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu\nu_{eL})$ | C |
| `CVp_buenue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{eL})$ | C |
| `CS_buenue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{e}_R\nu_{eL})$ | C |
| `CSp_buenue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{e}_R\nu_{eL})$ | C |
| `CT_buenue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu} b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{eL})$ | C |
| `CV_buenumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CVp_buenumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CS_buenumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{e}_R\nu_{\mu L})$ | C |
| `CSp_buenumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{e}_R\nu_{\mu L})$ | C |
| `CT_buenumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu} b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\mu L})$ | C |
| `CV_buenutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{e}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CVp_buenutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{e}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CS_buenutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{e}_R\nu_{\tau L})$ | C |
| `CSp_buenutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{e}_R\nu_{\tau L})$ | C |
| `CT_buenutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu} b_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{\tau L})$ | C |

`usenu`

| WC name | Operator | Type |
|---------|----------|------|
| `CV_suenue` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{e}_L\gamma_\mu\nu_{eL})$ | C |
| `CVp_suenue` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{e}_L\gamma_\mu\nu_{eL})$ | C |
| `CS_suenue` | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{e}_R\nu_{eL})$ | C |
| `CSp_suenue` | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{e}_R\nu_{eL})$ | C |
| `CT_suenue` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu} s_L)(\bar{e}_R\sigma_{\mu\nu}\nu_{eL})$ | C |
| `CV_suenumu` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{e}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CVp_suenumu` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{e}_L\gamma_\mu\nu_{\mu L})$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| CS_suenumu | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{e}_R \nu_{\mu L})$ | C |
| CSp_suenumu | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{e}_R \nu_{\mu L})$ | C |
| CT_suenumu | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R \sigma^{\mu\nu} s_L)(\bar{e}_R \sigma_{\mu\nu} \nu_{\mu L})$ | C |
| CV_suenutau | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L \gamma^{\mu} s_L)(\bar{e}_L \gamma_{\mu} \nu_{\tau L})$ | C |
| CVp_suenutau | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R \gamma^{\mu} s_R)(\bar{e}_L \gamma_{\mu} \nu_{\tau L})$ | C |
| CS_suenutau | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{e}_R \nu_{\tau L})$ | C |
| CSp_suenutau | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{e}_R \nu_{\tau L})$ | C |
| CT_suenutau | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R \sigma^{\mu\nu} s_L)(\bar{e}_R \sigma_{\mu\nu} \nu_{\tau L})$ | C |

cbmunu

| WC name | Operator | Type |
|---------|----------|------|
| CV_bcmunue | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L \gamma^{\mu} b_L)(\bar{\mu}_L \gamma_{\mu} \nu_{eL})$ | C |
| CVp_bcmunue | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R \gamma^{\mu} b_R)(\bar{\mu}_L \gamma_{\mu} \nu_{eL})$ | C |
| CS_bcmunue | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{\mu}_R \nu_{eL})$ | C |
| CSp_bcmunue | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{\mu}_R \nu_{eL})$ | C |
| CT_bcmunue | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R \sigma^{\mu\nu} b_L)(\bar{\mu}_R \sigma_{\mu\nu} \nu_{eL})$ | C |
| CV_bcmunumu | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L \gamma^{\mu} b_L)(\bar{\mu}_L \gamma_{\mu} \nu_{\mu L})$ | C |
| CVp_bcmunumu | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R \gamma^{\mu} b_R)(\bar{\mu}_L \gamma_{\mu} \nu_{\mu L})$ | C |
| CS_bcmunumu | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{\mu}_R \nu_{\mu L})$ | C |
| CSp_bcmunumu | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{\mu}_R \nu_{\mu L})$ | C |
| CT_bcmunumu | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R \sigma^{\mu\nu} b_L)(\bar{\mu}_R \sigma_{\mu\nu} \nu_{\mu L})$ | C |
| CV_bcmunutau | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L \gamma^{\mu} b_L)(\bar{\mu}_L \gamma_{\mu} \nu_{\tau L})$ | C |
| CVp_bcmunutau | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R \gamma^{\mu} b_R)(\bar{\mu}_L \gamma_{\mu} \nu_{\tau L})$ | C |
| CS_bcmunutau | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{\mu}_R \nu_{\tau L})$ | C |
| CSp_bcmunutau | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{\mu}_R \nu_{\tau L})$ | C |
| CT_bcmunutau | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R \sigma^{\mu\nu} b_L)(\bar{\mu}_R \sigma_{\mu\nu} \nu_{\tau L})$ | C |

ubmunu

| WC name | Operator | Type |
|---------|----------|------|
| CV_bumunue | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L \gamma^{\mu} b_L)(\bar{\mu}_L \gamma_{\mu} \nu_{eL})$ | C |
| CVp_bumunue | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R \gamma^{\mu} b_R)(\bar{\mu}_L \gamma_{\mu} \nu_{eL})$ | C |
| CS_bumunue | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{\mu}_R \nu_{eL})$ | C |
| CSp_bumunue | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{\mu}_R \nu_{eL})$ | C |

| WC name | Operator | Type |
|---|---|---|
| CT_bumunue | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{eL})$ | C |
| CV_bumunumu | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$ | C |
| CVp_bumunumu | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$ | C |
| CS_bumunumu | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{\mu}_R\nu_{\mu L})$ | C |
| CSp_bumunumu | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{\mu}_R\nu_{\mu L})$ | C |
| CT_bumunumu | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\mu L})$ | C |
| CV_bumunutau | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu\nu_{\tau L})$ | C |
| CVp_bumunutau | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\mu}_L\gamma_\mu\nu_{\tau L})$ | C |
| CS_bumunutau | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{\mu}_R\nu_{\tau L})$ | C |
| CSp_bumunutau | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{\mu}_R\nu_{\tau L})$ | C |
| CT_bumunutau | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\tau L})$ | C |

**usmunu**

| WC name | Operator | Type |
|---|---|---|
| CV_sumunue | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{\mu}_L\gamma_\mu\nu_{eL})$ | C |
| CVp_sumunue | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{\mu}_L\gamma_\mu\nu_{eL})$ | C |
| CS_sumunue | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{\mu}_R\nu_{eL})$ | C |
| CSp_sumunue | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{\mu}_R\nu_{eL})$ | C |
| CT_sumunue | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{eL})$ | C |
| CV_sumunumu | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$ | C |
| CVp_sumunumu | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{\mu}_L\gamma_\mu\nu_{\mu L})$ | C |
| CS_sumunumu | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{\mu}_R\nu_{\mu L})$ | C |
| CSp_sumunumu | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{\mu}_R\nu_{\mu L})$ | C |
| CT_sumunumu | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\mu L})$ | C |
| CV_sumunutau | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{\mu}_L\gamma_\mu\nu_{\tau L})$ | C |
| CVp_sumunutau | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{\mu}_L\gamma_\mu\nu_{\tau L})$ | C |
| CS_sumunutau | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{\mu}_R\nu_{\tau L})$ | C |
| CSp_sumunutau | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{\mu}_R\nu_{\tau L})$ | C |
| CT_sumunutau | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu}s_L)(\bar{\mu}_R\sigma_{\mu\nu}\nu_{\tau L})$ | C |

**cbtaunu**

| WC name | Operator | Type |
|---|---|---|
| CV_bctaunue | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\mu b_L)(\bar{\tau}_L\gamma_\mu\nu_{eL})$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| `CVp_bctaunue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^\mu b_R)(\bar{\tau}_L\gamma_\mu\nu_{eL})$ | C |
| `CS_bctaunue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{\tau}_R\nu_{eL})$ | C |
| `CSp_bctaunue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{\tau}_R\nu_{eL})$ | C |
| `CT_bctaunue` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$ | C |
| `CV_bctaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\mu b_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CVp_bctaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^\mu b_R)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CS_bctaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{\tau}_R\nu_{\mu L})$ | C |
| `CSp_bctaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{\tau}_R\nu_{\mu L})$ | C |
| `CT_bctaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$ | C |
| `CV_bctaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_L\gamma^\mu b_L)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CVp_bctaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\gamma^\mu b_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CS_bctaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_L b_R)(\bar{\tau}_R\nu_{\tau L})$ | C |
| `CSp_bctaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}m_b(\bar{c}_R b_L)(\bar{\tau}_R\nu_{\tau L})$ | C |
| `CT_bctaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{cb}(\bar{c}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$ | C |

**ubtaunu**

| WC name | Operator | Type |
|---------|----------|------|
| `CV_butaunue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\tau}_L\gamma_\mu\nu_{eL})$ | C |
| `CVp_butaunue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\tau}_L\gamma_\mu\nu_{eL})$ | C |
| `CS_butaunue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{\tau}_R\nu_{eL})$ | C |
| `CSp_butaunue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{\tau}_R\nu_{eL})$ | C |
| `CT_butaunue` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$ | C |
| `CV_butaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CVp_butaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CS_butaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{\tau}_R\nu_{\mu L})$ | C |
| `CSp_butaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{\tau}_R\nu_{\mu L})$ | C |
| `CT_butaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$ | C |
| `CV_butaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_L\gamma^\mu b_L)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CVp_butaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\gamma^\mu b_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CS_butaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_L b_R)(\bar{\tau}_R\nu_{\tau L})$ | C |
| `CSp_butaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}m_b(\bar{u}_R b_L)(\bar{\tau}_R\nu_{\tau L})$ | C |
| `CT_butaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{ub}(\bar{u}_R\sigma^{\mu\nu}b_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$ | C |

**ustaunu**

| WC name | Operator | Type |
|---|---|---|
| `CV_sutaunue` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{\tau}_L\gamma_\mu\nu_{eL})$ | C |
| `CVp_sutaunue` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{\tau}_L\gamma_\mu\nu_{eL})$ | C |
| `CS_sutaunue` | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{\tau}_R\nu_{eL})$ | C |
| `CSp_sutaunue` | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{\tau}_R\nu_{eL})$ | C |
| `CT_sutaunue` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu} s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{eL})$ | C |
| `CV_sutaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CVp_sutaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{\tau}_L\gamma_\mu\nu_{\mu L})$ | C |
| `CS_sutaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{\tau}_R\nu_{\mu L})$ | C |
| `CSp_sutaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{\tau}_R\nu_{\mu L})$ | C |
| `CT_sutaunumu` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu} s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\mu L})$ | C |
| `CV_sutaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_L\gamma^\mu s_L)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CVp_sutaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\gamma^\mu s_R)(\bar{\tau}_L\gamma_\mu\nu_{\tau L})$ | C |
| `CS_sutaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_L s_R)(\bar{\tau}_R\nu_{\tau L})$ | C |
| `CSp_sutaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{us}m_s(\bar{u}_R s_L)(\bar{\tau}_R\nu_{\tau L})$ | C |
| `CT_sutaunutau` | $-\frac{4G_F}{\sqrt{2}}V_{us}(\bar{u}_R\sigma^{\mu\nu} s_L)(\bar{\tau}_R\sigma_{\mu\nu}\nu_{\tau L})$ | C |

# Basis `formflavor` (EFT `WET`)

## Sectors

`sbsb`

| WC name | Operator | Type |
|---|---|---|
| `CVLL_bsbs` | $(\bar{s}_L\gamma^\mu b_L)(\bar{s}_L\gamma_\mu b_L)$ | C |
| `CVRR_bsbs` | $(\bar{s}_R\gamma^\mu b_R)(\bar{s}_R\gamma_\mu b_R)$ | C |
| `CSLL_bsbs` | $(\bar{s}_R b_L)(\bar{s}_R b_L)$ | C |
| `CSRR_bsbs` | $(\bar{s}_L b_R)(\bar{s}_L b_R)$ | C |
| `CTLL_bsbs` | $(\bar{s}_R\sigma^{\mu\nu} b_L)(\bar{s}_R\sigma_{\mu\nu} b_L)$ | C |
| `CTRR_bsbs` | $(\bar{s}_L\sigma^{\mu\nu} b_R)(\bar{s}_L\sigma_{\mu\nu} b_R)$ | C |
| `CVLR_bsbs` | $(\bar{s}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| `CSLR_bsbs` | $(\bar{s}_R b_L)(\bar{s}_L b_R)$ | C |

`dbdb`

| WC name | Operator | Type |
|---|---|---|
| `CVLL_bdbd` | $(\bar{d}_L\gamma^\mu b_L)(\bar{d}_L\gamma_\mu b_L)$ | C |
| `CVRR_bdbd` | $(\bar{d}_R\gamma^\mu b_R)(\bar{d}_R\gamma_\mu b_R)$ | C |
| `CSLL_bdbd` | $(\bar{d}_R b_L)(\bar{d}_R b_L)$ | C |
| `CSRR_bdbd` | $(\bar{d}_L b_R)(\bar{d}_L b_R)$ | C |
| `CTLL_bdbd` | $(\bar{d}_R\sigma^{\mu\nu} b_L)(\bar{d}_R\sigma_{\mu\nu} b_L)$ | C |
| `CTRR_bdbd` | $(\bar{d}_L\sigma^{\mu\nu} b_R)(\bar{d}_L\sigma_{\mu\nu} b_R)$ | C |
| `CVLR_bdbd` | $(\bar{d}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| `CSLR_bdbd` | $(\bar{d}_R b_L)(\bar{d}_L b_R)$ | C |

`sdsd`

| WC name | Operator | Type |
|---|---|---|
| `CVLL_sdsd` | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_L\gamma_\mu s_L)$ | C |
| `CVRR_sdsd` | $(\bar{d}_R\gamma^\mu s_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| `CSLL_sdsd` | $(\bar{d}_R s_L)(\bar{d}_R s_L)$ | C |
| `CSRR_sdsd` | $(\bar{d}_L s_R)(\bar{d}_L s_R)$ | C |
| `CTLL_sdsd` | $(\bar{d}_R\sigma^{\mu\nu} s_L)(\bar{d}_R\sigma_{\mu\nu} s_L)$ | C |
| `CTRR_sdsd` | $(\bar{d}_L\sigma^{\mu\nu} s_R)(\bar{d}_L\sigma_{\mu\nu} s_R)$ | C |
| `CVLR_sdsd` | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| `CSLR_sdsd` | $(\bar{d}_R s_L)(\bar{d}_L s_R)$ | C |

**cucu**

| WC name | Operator | Type |
|---|---|---|
| CVLL_cucu | $(\bar{u}_L\gamma^\mu c_L)(\bar{u}_L\gamma_\mu c_L)$ | C |
| CVRR_cucu | $(\bar{u}_R\gamma^\mu c_R)(\bar{u}_R\gamma_\mu c_R)$ | C |
| CSLL_cucu | $(\bar{u}_R c_L)(\bar{u}_R c_L)$ | C |
| CSRR_cucu | $(\bar{u}_L c_R)(\bar{u}_L c_R)$ | C |
| CTLL_cucu | $(\bar{u}_R\sigma^{\mu\nu} c_L)(\bar{u}_R\sigma_{\mu\nu} c_L)$ | C |
| CTRR_cucu | $(\bar{u}_L\sigma^{\mu\nu} c_R)(\bar{u}_L\sigma_{\mu\nu} c_R)$ | C |
| CVLR_cucu | $(\bar{u}_L\gamma^\mu c_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| CSLR_cucu | $(\bar{u}_R c_L)(\bar{u}_L c_R)$ | C |

**sb**

| WC name | Operator | Type |
|---|---|---|
| CVLL_bsmm | $(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu \mu_L)$ | C |
| CVRR_bsmm | $(\bar{s}_R\gamma^\mu b_R)(\bar{\mu}_R\gamma_\mu \mu_R)$ | C |
| CVLR_bsmm | $(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}_R\gamma_\mu \mu_R)$ | C |
| CVRL_bsmm | $(\bar{s}_R\gamma^\mu b_R)(\bar{\mu}_L\gamma_\mu \mu_L)$ | C |
| CSLL_bsmm | $(\bar{s}_R b_L)(\bar{\mu}_R \mu_L)$ | C |
| CSRR_bsmm | $(\bar{s}_L b_R)(\bar{\mu}_L \mu_R)$ | C |
| CSLR_bsmm | $(\bar{s}_R b_L)(\bar{\mu}_L \mu_R)$ | C |
| CSRL_bsmm | $(\bar{s}_L b_R)(\bar{\mu}_R \mu_L)$ | C |
| CTLL_bsmm | $(\bar{s}_R\sigma^{\mu\nu} b_L)(\bar{\mu}_R\sigma_{\mu\nu} \mu_L)$ | C |
| CTRR_bsmm | $(\bar{s}_L\sigma^{\mu\nu} b_R)(\bar{\mu}_L\sigma_{\mu\nu} \mu_R)$ | C |
| CAR_sb | $(\bar{s}_L\sigma^{\mu\nu} b_R)F_{\mu\nu}$ | C |
| CAL_sb | $(\bar{s}_R\sigma^{\mu\nu} b_L)F_{\mu\nu}$ | C |
| CGR_sb | $(\bar{s}_L\sigma^{\mu\nu} b_R)G_{\mu\nu}$ | C |
| CGL_sb | $(\bar{s}_R\sigma^{\mu\nu} b_L)G_{\mu\nu}$ | C |

**db**

| WC name | Operator | Type |
|---|---|---|
| CVLL_bdmm | $(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}_L\gamma_\mu \mu_L)$ | C |
| CVRR_bdmm | $(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}_R\gamma_\mu \mu_R)$ | C |
| CVLR_bdmm | $(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}_R\gamma_\mu \mu_R)$ | C |
| CVRL_bdmm | $(\bar{d}_R\gamma^\mu b_R)(\bar{\mu}_L\gamma_\mu \mu_L)$ | C |
| CSLL_bdmm | $(\bar{d}_R b_L)(\bar{\mu}_R \mu_L)$ | C |
| CSRR_bdmm | $(\bar{d}_L b_R)(\bar{\mu}_L \mu_R)$ | C |
| CSLR_bdmm | $(\bar{d}_R b_L)(\bar{\mu}_L \mu_R)$ | C |
| CSRL_bdmm | $(\bar{d}_L b_R)(\bar{\mu}_R \mu_L)$ | C |

| WC name | Operator | Type |
|---|---|---|
| `CTLL_bdmm` | $(\bar{d}_R\sigma^{\mu\nu}b_L)(\bar{\mu}_R\sigma_{\mu\nu}\mu_L)$ | C |
| `CTRR_bdmm` | $(\bar{d}_L\sigma^{\mu\nu}b_R)(\bar{\mu}_L\sigma_{\mu\nu}\mu_R)$ | C |
| `CAR_db` | $(\bar{d}_L\sigma^{\mu\nu}b_R)F_{\mu\nu}$ | C |
| `CAL_db` | $(\bar{d}_R\sigma^{\mu\nu}b_L)F_{\mu\nu}$ | C |
| `CGR_db` | $(\bar{d}_L\sigma^{\mu\nu}b_R)G_{\mu\nu}$ | C |
| `CGL_db` | $(\bar{d}_R\sigma^{\mu\nu}b_L)G_{\mu\nu}$ | C |

`sdnunu`

| WC name | Operator | Type |
|---|---|---|
| `CVLL_sdnn` | $(\bar{d}_L\gamma^{\mu}s_L)(\bar{\nu}_L\gamma_{\mu}\nu_L)$ | C |
| `CVRL_sdnn` | $(\bar{d}_R\gamma^{\mu}s_R)(\bar{\nu}_L\gamma_{\mu}\nu_L)$ | C |

`dF=0`

| WC name | Operator | Type |
|---|---|---|
| `CAR_dd` | $(\bar{d}_L\sigma^{\mu\nu}d_R)F_{\mu\nu}$ | C |
| `CAL_dd` | $(\bar{d}_R\sigma^{\mu\nu}d_L)F_{\mu\nu}$ | C |
| `CGR_dd` | $(\bar{d}_L\sigma^{\mu\nu}d_R)G_{\mu\nu}$ | C |
| `CGL_dd` | $(\bar{d}_R\sigma^{\mu\nu}d_L)G_{\mu\nu}$ | C |
| `CAR_uu` | $(\bar{u}_L\sigma^{\mu\nu}u_R)F_{\mu\nu}$ | C |
| `CAL_uu` | $(\bar{u}_R\sigma^{\mu\nu}u_L)F_{\mu\nu}$ | C |
| `CGR_uu` | $(\bar{u}_L\sigma^{\mu\nu}u_R)G_{\mu\nu}$ | C |
| `CGL_uu` | $(\bar{u}_R\sigma^{\mu\nu}u_L)G_{\mu\nu}$ | C |

`mue`

| WC name | Operator | Type |
|---|---|---|
| `CAR_em` | $(\bar{e}_L\sigma^{\mu\nu}\mu_R)F_{\mu\nu}$ | C |
| `CAL_em` | $(\bar{e}_R\sigma^{\mu\nu}\mu_L)F_{\mu\nu}$ | C |

`mutau`

| WC name | Operator | Type |
|---|---|---|
| `CAR_mt` | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)F_{\mu\nu}$ | C |
| `CAL_mt` | $(\bar{\mu}_R\sigma^{\mu\nu}\tau_L)F_{\mu\nu}$ | C |

**taue**

| WC name | Operator | Type |
|---------|----------|------|
| CAR_et | $(\bar{e}_L \sigma^{\mu\nu} \tau_R) F_{\mu\nu}$ | C |
| CAL_et | $(\bar{e}_R \sigma^{\mu\nu} \tau_L) F_{\mu\nu}$ | C |

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# Basis `JMS` (EFT `WET`)

Basis suggested by Jenkins, Manohar, and Stoffer (arXiv:1709.04486). Currently only includes baryon and lepton number conserving operators. Neutrinos are in the mass basis.

## Sectors

**sbsb**

| WC name | Operator | Type |
|---------|----------|------|
| VddLL_2323 | $(\bar{s}_L\gamma^\mu b_L)(\bar{s}_L\gamma_\mu b_L)$ | C |
| VddRR_2323 | $(\bar{s}_R\gamma^\mu b_R)(\bar{s}_R\gamma_\mu b_R)$ | C |
| V1ddLR_2323 | $(\bar{s}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| V8ddLR_2323 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A b_R)$ | C |
| S1ddRR_2323 | $(\bar{s}_L b_R)(\bar{s}_L b_R)$ | C |
| S1ddRR_3232 | $(\bar{b}_L s_R)(\bar{b}_L s_R)$ | C |
| S8ddRR_2323 | $(\bar{s}_L T^A b_R)(\bar{s}_L T^A b_R)$ | C |
| S8ddRR_3232 | $(\bar{b}_L T^A s_R)(\bar{b}_L T^A s_R)$ | C |

**dbdb**

| WC name | Operator | Type |
|---------|----------|------|
| VddLL_1313 | $(\bar{d}_L\gamma^\mu b_L)(\bar{d}_L\gamma_\mu b_L)$ | C |
| VddRR_1313 | $(\bar{d}_R\gamma^\mu b_R)(\bar{d}_R\gamma_\mu b_R)$ | C |
| V1ddLR_1313 | $(\bar{d}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| V8ddLR_1313 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A b_R)$ | C |
| S1ddRR_1313 | $(\bar{d}_L b_R)(\bar{d}_L b_R)$ | C |
| S1ddRR_3131 | $(\bar{b}_L d_R)(\bar{b}_L d_R)$ | C |
| S8ddRR_1313 | $(\bar{d}_L T^A b_R)(\bar{d}_L T^A b_R)$ | C |
| S8ddRR_3131 | $(\bar{b}_L T^A d_R)(\bar{b}_L T^A d_R)$ | C |

**sdsd**

| WC name | Operator | Type |
|---------|----------|------|
| VddLL_1212 | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_L\gamma_\mu s_L)$ | C |
| VddRR_1212 | $(\bar{d}_R\gamma^\mu s_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V1ddLR_1212 | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V8ddLR_1212 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| S1ddRR_1212 | $(\bar{d}_L s_R)(\bar{d}_L s_R)$ | C |
| S1ddRR_2121 | $(\bar{s}_L d_R)(\bar{s}_L d_R)$ | C |
| S8ddRR_1212 | $(\bar{d}_L T^A s_R)(\bar{d}_L T^A s_R)$ | C |
| S8ddRR_2121 | $(\bar{s}_L T^A d_R)(\bar{s}_L T^A d_R)$ | C |

cucu

| WC name | Operator | Type |
|---|---|---|
| VuuLL_1212 | $(\bar{u}_L \gamma^\mu c_L)(\bar{u}_L \gamma_\mu c_L)$ | C |
| VuuRR_1212 | $(\bar{u}_R \gamma^\mu c_R)(\bar{u}_R \gamma_\mu c_R)$ | C |
| V1uuLR_1212 | $(\bar{u}_L \gamma^\mu c_L)(\bar{u}_R \gamma_\mu c_R)$ | C |
| V8uuLR_1212 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{u}_R \gamma_\mu T^A c_R)$ | C |
| S1uuRR_1212 | $(\bar{u}_L c_R)(\bar{u}_L c_R)$ | C |
| S1uuRR_2121 | $(\bar{c}_L u_R)(\bar{c}_L u_R)$ | C |
| S8uuRR_1212 | $(\bar{u}_L T^A c_R)(\bar{u}_L T^A c_R)$ | C |
| S8uuRR_2121 | $(\bar{c}_L T^A u_R)(\bar{c}_L T^A u_R)$ | C |

dbsb

| WC name | Operator | Type |
|---|---|---|
| VddLL_1323 | $(\bar{d}_L \gamma^\mu b_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| VddRR_1323 | $(\bar{d}_R \gamma^\mu b_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| V1ddLR_1323 | $(\bar{d}_L \gamma^\mu b_L)(\bar{s}_R \gamma_\mu b_R)$ | C |
| V1ddLR_2313 | $(\bar{s}_L \gamma^\mu b_L)(\bar{d}_R \gamma_\mu b_R)$ | C |
| V8ddLR_1323 | $(\bar{d}_L \gamma^\mu T^A b_L)(\bar{s}_R \gamma_\mu T^A b_R)$ | C |
| V8ddLR_2313 | $(\bar{s}_L \gamma^\mu T^A b_L)(\bar{d}_R \gamma_\mu T^A b_R)$ | C |
| S1ddRR_1323 | $(\bar{d}_L b_R)(\bar{s}_L b_R)$ | C |
| S1ddRR_3132 | $(\bar{b}_L d_R)(\bar{b}_L s_R)$ | C |
| S8ddRR_1323 | $(\bar{d}_L T^A b_R)(\bar{s}_L T^A b_R)$ | C |
| S8ddRR_3132 | $(\bar{b}_L T^A d_R)(\bar{b}_L T^A s_R)$ | C |

sbuc

| WC name | Operator | Type |
|---|---|---|
| V1udLL_1223 | $(\bar{u}_L \gamma^\mu c_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| V8udLL_1223 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{s}_L \gamma_\mu T^A b_L)$ | C |
| V1udRR_1223 | $(\bar{u}_R \gamma^\mu c_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| V8udRR_1223 | $(\bar{u}_R \gamma^\mu T^A c_R)(\bar{s}_R \gamma_\mu T^A b_R)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| V1udLR_1223 | $(\bar{u}_L\gamma^\mu c_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| V8udLR_1223 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{s}_R\gamma_\mu T^A b_R)$ | C |
| V1duLR_2312 | $(\bar{s}_L\gamma^\mu b_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| V8duLR_2312 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{u}_R\gamma_\mu T^A c_R)$ | C |
| V1udduLR_1322 | $(\bar{u}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2231 | $(\bar{c}_L\gamma^\mu s_L)(\bar{b}_R\gamma_\mu u_R)$ | C |
| V8udduLR_1322 | $(\bar{u}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2231 | $(\bar{c}_L\gamma^\mu T^A s_L)(\bar{b}_R\gamma_\mu T^A u_R)$ | C |
| S1udRR_1223 | $(\bar{u}_L c_R)(\bar{s}_L b_R)$ | C |
| S1udRR_2132 | $(\bar{c}_L u_R)(\bar{b}_L s_R)$ | C |
| S8udRR_1223 | $(\bar{u}_L T^A c_R)(\bar{s}_L T^A b_R)$ | C |
| S8udRR_2132 | $(\bar{c}_L T^A u_R)(\bar{b}_L T^A s_R)$ | C |
| S1udduRR_1322 | $(\bar{u}_L b_R)(\bar{s}_L c_R)$ | C |
| S1udduRR_2231 | $(\bar{c}_L s_R)(\bar{b}_L u_R)$ | C |
| S8udduRR_1322 | $(\bar{u}_L T^A b_R)(\bar{s}_L T^A c_R)$ | C |
| S8udduRR_2231 | $(\bar{c}_L T^A s_R)(\bar{b}_L T^A u_R)$ | C |

**sbcu**

| WC name | Operator | Type |
| --- | --- | --- |
| V1udLL_1232 | $(\bar{u}_L\gamma^\mu c_L)(\bar{b}_L\gamma_\mu s_L)$ | C |
| V8udLL_1232 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{b}_L\gamma_\mu T^A s_L)$ | C |
| V1udRR_1232 | $(\bar{u}_R\gamma^\mu c_R)(\bar{b}_R\gamma_\mu s_R)$ | C |
| V8udRR_1232 | $(\bar{u}_R\gamma^\mu T^A c_R)(\bar{b}_R\gamma_\mu T^A s_R)$ | C |
| V1udLR_1232 | $(\bar{u}_L\gamma^\mu c_L)(\bar{b}_R\gamma_\mu s_R)$ | C |
| V8udLR_1232 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{b}_R\gamma_\mu T^A s_R)$ | C |
| V1duLR_2321 | $(\bar{s}_L\gamma^\mu b_L)(\bar{c}_R\gamma_\mu u_R)$ | C |
| V8duLR_2321 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{c}_R\gamma_\mu T^A u_R)$ | C |
| V1udduLR_1232 | $(\bar{u}_L\gamma^\mu s_L)(\bar{b}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2321 | $(\bar{c}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu u_R)$ | C |
| V8udduLR_1232 | $(\bar{u}_L\gamma^\mu T^A s_L)(\bar{b}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2321 | $(\bar{c}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A u_R)$ | C |
| S1udRR_1232 | $(\bar{u}_L c_R)(\bar{b}_L s_R)$ | C |
| S1udRR_2123 | $(\bar{c}_L u_R)(\bar{s}_L b_R)$ | C |
| S8udRR_1232 | $(\bar{u}_L T^A c_R)(\bar{b}_L T^A s_R)$ | C |
| S8udRR_2123 | $(\bar{c}_L T^A u_R)(\bar{s}_L T^A b_R)$ | C |
| S1udduRR_1232 | $(\bar{u}_L s_R)(\bar{b}_L c_R)$ | C |
| S1udduRR_2321 | $(\bar{c}_L b_R)(\bar{s}_L u_R)$ | C |
| S8udduRR_1232 | $(\bar{u}_L T^A s_R)(\bar{b}_L T^A c_R)$ | C |
| S8udduRR_2321 | $(\bar{c}_L T^A b_R)(\bar{s}_L T^A u_R)$ | C |

dbuc

| WC name | Operator | Type |
|---------|----------|------|
| V1udLL_1213 | $(\bar{u}_L\gamma^\mu c_L)(\bar{d}_L\gamma_\mu b_L)$ | C |
| V8udLL_1213 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{d}_L\gamma_\mu T^A b_L)$ | C |
| V1udRR_1213 | $(\bar{u}_R\gamma^\mu c_R)(\bar{d}_R\gamma_\mu b_R)$ | C |
| V8udRR_1213 | $(\bar{u}_R\gamma^\mu T^A c_R)(\bar{d}_R\gamma_\mu T^A b_R)$ | C |
| V1udLR_1213 | $(\bar{u}_L\gamma^\mu c_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| V8udLR_1213 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{d}_R\gamma_\mu T^A b_R)$ | C |
| V1duLR_1312 | $(\bar{d}_L\gamma^\mu b_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| V8duLR_1312 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{u}_R\gamma_\mu T^A c_R)$ | C |
| V1udduLR_1312 | $(\bar{u}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2131 | $(\bar{c}_L\gamma^\mu d_L)(\bar{b}_R\gamma_\mu u_R)$ | C |
| V8udduLR_1312 | $(\bar{u}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2131 | $(\bar{c}_L\gamma^\mu T^A d_L)(\bar{b}_R\gamma_\mu T^A u_R)$ | C |
| S1udRR_1213 | $(\bar{u}_L c_R)(\bar{d}_L b_R)$ | C |
| S1udRR_2131 | $(\bar{c}_L u_R)(\bar{b}_L d_R)$ | C |
| S8udRR_1213 | $(\bar{u}_L T^A c_R)(\bar{d}_L T^A b_R)$ | C |
| S8udRR_2131 | $(\bar{c}_L T^A u_R)(\bar{b}_L T^A d_R)$ | C |
| S1udduRR_1312 | $(\bar{u}_L b_R)(\bar{d}_L c_R)$ | C |
| S1udduRR_2131 | $(\bar{c}_L d_R)(\bar{b}_L u_R)$ | C |
| S8udduRR_1312 | $(\bar{u}_L T^A b_R)(\bar{d}_L T^A c_R)$ | C |
| S8udduRR_2131 | $(\bar{c}_L T^A d_R)(\bar{b}_L T^A u_R)$ | C |

dbcu

| WC name | Operator | Type |
|---------|----------|------|
| V1udLL_1231 | $(\bar{u}_L\gamma^\mu c_L)(\bar{b}_L\gamma_\mu d_L)$ | C |
| V8udLL_1231 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{b}_L\gamma_\mu T^A d_L)$ | C |
| V1udRR_1231 | $(\bar{u}_R\gamma^\mu c_R)(\bar{b}_R\gamma_\mu d_R)$ | C |
| V8udRR_1231 | $(\bar{u}_R\gamma^\mu T^A c_R)(\bar{b}_R\gamma_\mu T^A d_R)$ | C |
| V1udLR_1231 | $(\bar{u}_L\gamma^\mu c_L)(\bar{b}_R\gamma_\mu d_R)$ | C |
| V8udLR_1231 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{b}_R\gamma_\mu T^A d_R)$ | C |
| V1duLR_1321 | $(\bar{d}_L\gamma^\mu b_L)(\bar{c}_R\gamma_\mu u_R)$ | C |
| V8duLR_1321 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{c}_R\gamma_\mu T^A u_R)$ | C |
| V1udduLR_1132 | $(\bar{u}_L\gamma^\mu d_L)(\bar{b}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2311 | $(\bar{c}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| V8udduLR_1132 | $(\bar{u}_L\gamma^\mu T^A d_L)(\bar{b}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2311 | $(\bar{c}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A u_R)$ | C |
| S1udRR_1231 | $(\bar{u}_L c_R)(\bar{b}_L d_R)$ | C |
| S1udRR_2113 | $(\bar{c}_L u_R)(\bar{d}_L b_R)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| S8udRR_1231 | $(\bar{u}_L T^A c_R)(\bar{b}_L T^A d_R)$ | C |
| S8udRR_2113 | $(\bar{c}_L T^A u_R)(\bar{d}_L T^A b_R)$ | C |
| S1udduRR_1132 | $(\bar{u}_L d_R)(\bar{b}_L c_R)$ | C |
| S1udduRR_2311 | $(\bar{c}_L b_R)(\bar{d}_L u_R)$ | C |
| S8udduRR_1132 | $(\bar{u}_L T^A d_R)(\bar{b}_L T^A c_R)$ | C |
| S8udduRR_2311 | $(\bar{c}_L T^A b_R)(\bar{d}_L T^A u_R)$ | C |

**sduc**

| WC name | Operator | Type |
| --- | --- | --- |
| V1udLL_1221 | $(\bar{u}_L \gamma^\mu c_L)(\bar{s}_L \gamma_\mu d_L)$ | C |
| V8udLL_1221 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{s}_L \gamma_\mu T^A d_L)$ | C |
| V1udRR_1221 | $(\bar{u}_R \gamma^\mu c_R)(\bar{s}_R \gamma_\mu d_R)$ | C |
| V8udRR_1221 | $(\bar{u}_R \gamma^\mu T^A c_R)(\bar{s}_R \gamma_\mu T^A d_R)$ | C |
| V1udLR_1221 | $(\bar{u}_L \gamma^\mu c_L)(\bar{s}_R \gamma_\mu d_R)$ | C |
| V8udLR_1221 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{s}_R \gamma_\mu T^A d_R)$ | C |
| V1duLR_1221 | $(\bar{d}_L \gamma^\mu s_L)(\bar{c}_R \gamma_\mu u_R)$ | C |
| V8duLR_1221 | $(\bar{d}_L \gamma^\mu T^A s_L)(\bar{c}_R \gamma_\mu T^A u_R)$ | C |
| V1udduLR_1122 | $(\bar{u}_L \gamma^\mu d_L)(\bar{s}_R \gamma_\mu c_R)$ | C |
| V1udduLR_2211 | $(\bar{c}_L \gamma^\mu s_L)(\bar{d}_R \gamma_\mu u_R)$ | C |
| V8udduLR_1122 | $(\bar{u}_L \gamma^\mu T^A d_L)(\bar{s}_R \gamma_\mu T^A c_R)$ | C |
| V8udduLR_2211 | $(\bar{c}_L \gamma^\mu T^A s_L)(\bar{d}_R \gamma_\mu T^A u_R)$ | C |
| S1udRR_1221 | $(\bar{u}_L c_R)(\bar{s}_L d_R)$ | C |
| S1udRR_2112 | $(\bar{c}_L u_R)(\bar{d}_L s_R)$ | C |
| S8udRR_1221 | $(\bar{u}_L T^A c_R)(\bar{s}_L T^A d_R)$ | C |
| S8udRR_2112 | $(\bar{c}_L T^A u_R)(\bar{d}_L T^A s_R)$ | C |
| S1udduRR_1122 | $(\bar{u}_L d_R)(\bar{s}_L c_R)$ | C |
| S1udduRR_2211 | $(\bar{c}_L s_R)(\bar{d}_L u_R)$ | C |
| S8udduRR_1122 | $(\bar{u}_L T^A d_R)(\bar{s}_L T^A c_R)$ | C |
| S8udduRR_2211 | $(\bar{c}_L T^A s_R)(\bar{d}_L T^A u_R)$ | C |

**sdcu**

| WC name | Operator | Type |
| --- | --- | --- |
| V1udLL_1212 | $(\bar{u}_L \gamma^\mu c_L)(\bar{d}_L \gamma_\mu s_L)$ | C |
| V8udLL_1212 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{d}_L \gamma_\mu T^A s_L)$ | C |
| V1udRR_1212 | $(\bar{u}_R \gamma^\mu c_R)(\bar{d}_R \gamma_\mu s_R)$ | C |
| V8udRR_1212 | $(\bar{u}_R \gamma^\mu T^A c_R)(\bar{d}_R \gamma_\mu T^A s_R)$ | C |
| V1udLR_1212 | $(\bar{u}_L \gamma^\mu c_L)(\bar{d}_R \gamma_\mu s_R)$ | C |
| V8udLR_1212 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{d}_R \gamma_\mu T^A s_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| V1duLR_1212 | $(\bar{d}_L\gamma^\mu s_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| V8duLR_1212 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{u}_R\gamma_\mu T^A c_R)$ | C |
| V1udduLR_1212 | $(\bar{u}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2121 | $(\bar{c}_L\gamma^\mu d_L)(\bar{s}_R\gamma_\mu u_R)$ | C |
| V8udduLR_1212 | $(\bar{u}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2121 | $(\bar{c}_L\gamma^\mu T^A d_L)(\bar{s}_R\gamma_\mu T^A u_R)$ | C |
| S1udRR_1212 | $(\bar{u}_L c_R)(\bar{d}_L s_R)$ | C |
| S1udRR_2121 | $(\bar{c}_L u_R)(\bar{s}_L d_R)$ | C |
| S8udRR_1212 | $(\bar{u}_L T^A c_R)(\bar{d}_L T^A s_R)$ | C |
| S8udRR_2121 | $(\bar{c}_L T^A u_R)(\bar{s}_L T^A d_R)$ | C |
| S1udduRR_1212 | $(\bar{u}_L s_R)(\bar{d}_L c_R)$ | C |
| S1udduRR_2121 | $(\bar{c}_L d_R)(\bar{s}_L u_R)$ | C |
| S8udduRR_1212 | $(\bar{u}_L T^A s_R)(\bar{d}_L T^A c_R)$ | C |
| S8udduRR_2121 | $(\bar{c}_L T^A d_R)(\bar{s}_L T^A u_R)$ | C |

**sbsd**

| WC name | Operator | Type |
|---|---|---|
| VddLL_1232 | $(\bar{d}_L\gamma^\mu s_L)(\bar{b}_L\gamma_\mu s_L)$ | C |
| VddRR_1232 | $(\bar{d}_R\gamma^\mu s_R)(\bar{b}_R\gamma_\mu s_R)$ | C |
| V1ddLR_1232 | $(\bar{d}_L\gamma^\mu s_L)(\bar{b}_R\gamma_\mu s_R)$ | C |
| V1ddLR_2321 | $(\bar{s}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu d_R)$ | C |
| V8ddLR_1232 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{b}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_2321 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A d_R)$ | C |
| S1ddRR_1232 | $(\bar{d}_L s_R)(\bar{b}_L s_R)$ | C |
| S1ddRR_2123 | $(\bar{s}_L d_R)(\bar{s}_L b_R)$ | C |
| S8ddRR_1232 | $(\bar{d}_L T^A s_R)(\bar{b}_L T^A s_R)$ | C |
| S8ddRR_2123 | $(\bar{s}_L T^A d_R)(\bar{s}_L T^A b_R)$ | C |

**dbds**

| WC name | Operator | Type |
|---|---|---|
| VddLL_1213 | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_L\gamma_\mu b_L)$ | C |
| VddRR_1213 | $(\bar{d}_R\gamma^\mu s_R)(\bar{d}_R\gamma_\mu b_R)$ | C |
| V1ddLR_1213 | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| V1ddLR_1312 | $(\bar{d}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V8ddLR_1213 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_1312 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| S1ddRR_1213 | $(\bar{d}_L s_R)(\bar{d}_L b_R)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| S1ddRR_2131 | $(\bar{s}_L d_R)(\bar{b}_L d_R)$ | C |
| S8ddRR_1213 | $(\bar{d}_L T^A s_R)(\bar{d}_L T^A b_R)$ | C |
| S8ddRR_2131 | $(\bar{s}_L T^A d_R)(\bar{b}_L T^A d_R)$ | C |

**sb**

| WC name | Operator | Type |
|---------|----------|------|
| dgamma_23 | $\bar{s}_L \sigma^{\mu\nu} b_R \, F_{\mu\nu}$ | C |
| dgamma_32 | $\bar{b}_L \sigma^{\mu\nu} s_R \, F_{\mu\nu}$ | C |
| dG_23 | $\bar{s}_L \sigma^{\mu\nu} T^A b_R \, G^A_{\mu\nu}$ | C |
| dG_32 | $\bar{b}_L \sigma^{\mu\nu} T^A s_R \, G^A_{\mu\nu}$ | C |
| VedLL_1123 | $(\bar{e}_L \gamma^\mu e_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| VedLL_2223 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| VedLL_3323 | $(\bar{\tau}_L \gamma^\mu \tau_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| VddLL_1123 | $(\bar{d}_L \gamma^\mu d_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| VddLL_1231 | $(\bar{d}_L \gamma^\mu s_L)(\bar{b}_L \gamma_\mu d_L)$ | C |
| VddLL_2223 | $(\bar{s}_L \gamma^\mu s_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| VddLL_2333 | $(\bar{s}_L \gamma^\mu b_L)(\bar{b}_L \gamma_\mu b_L)$ | C |
| V1udLL_1123 | $(\bar{u}_L \gamma^\mu u_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| V1udLL_2223 | $(\bar{c}_L \gamma^\mu c_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| V8udLL_1123 | $(\bar{u}_L \gamma^\mu T^A u_L)(\bar{s}_L \gamma_\mu T^A b_L)$ | C |
| V8udLL_2223 | $(\bar{c}_L \gamma^\mu T^A c_L)(\bar{s}_L \gamma_\mu T^A b_L)$ | C |
| VedRR_1123 | $(\bar{e}_R \gamma^\mu e_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VedRR_2223 | $(\bar{\mu}_R \gamma^\mu \mu_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VedRR_3323 | $(\bar{\tau}_R \gamma^\mu \tau_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VddRR_1123 | $(\bar{d}_R \gamma^\mu d_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VddRR_1231 | $(\bar{d}_R \gamma^\mu s_R)(\bar{b}_R \gamma_\mu d_R)$ | C |
| VddRR_2223 | $(\bar{s}_R \gamma^\mu s_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VddRR_2333 | $(\bar{s}_R \gamma^\mu b_R)(\bar{b}_R \gamma_\mu b_R)$ | C |
| V1udRR_1123 | $(\bar{u}_R \gamma^\mu u_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| V1udRR_2223 | $(\bar{c}_R \gamma^\mu c_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| V8udRR_1123 | $(\bar{u}_R \gamma^\mu T^A u_R)(\bar{s}_R \gamma_\mu T^A b_R)$ | C |
| V8udRR_2223 | $(\bar{c}_R \gamma^\mu T^A c_R)(\bar{s}_R \gamma_\mu T^A b_R)$ | C |
| VedLR_1123 | $(\bar{e}_L \gamma^\mu e_L)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VedLR_2223 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VedLR_3323 | $(\bar{\tau}_L \gamma^\mu \tau_L)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VdeLR_2311 | $(\bar{s}_L \gamma^\mu b_L)(\bar{e}_R \gamma_\mu e_R)$ | C |
| VdeLR_2322 | $(\bar{s}_L \gamma^\mu b_L)(\bar{\mu}_R \gamma_\mu \mu_R)$ | C |
| VdeLR_2333 | $(\bar{s}_L \gamma^\mu b_L)(\bar{\tau}_R \gamma_\mu \tau_R)$ | C |
| V1udLR_1123 | $(\bar{u}_L \gamma^\mu u_L)(\bar{s}_R \gamma_\mu b_R)$ | C |
| V1udLR_2223 | $(\bar{c}_L \gamma^\mu c_L)(\bar{s}_R \gamma_\mu b_R)$ | C |
| V8udLR_1123 | $(\bar{u}_L \gamma^\mu T^A u_L)(\bar{s}_R \gamma_\mu T^A b_R)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| V8udLR_2223 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{s}_R\gamma_\mu T^A b_R)$ | C |
| V1duLR_2311 | $(\bar{s}_L\gamma^\mu b_L)(\bar{u}_R\gamma_\mu u_R)$ | C |
| V1duLR_2322 | $(\bar{s}_L\gamma^\mu b_L)(\bar{c}_R\gamma_\mu c_R)$ | C |
| V8duLR_2311 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{u}_R\gamma_\mu T^A u_R)$ | C |
| V8duLR_2322 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{c}_R\gamma_\mu T^A c_R)$ | C |
| V1ddLR_1123 | $(\bar{d}_L\gamma^\mu d_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| V1ddLR_1231 | $(\bar{d}_L\gamma^\mu s_L)(\bar{b}_R\gamma_\mu d_R)$ | C |
| V1ddLR_1321 | $(\bar{d}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu d_R)$ | C |
| V1ddLR_2223 | $(\bar{s}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| V1ddLR_2311 | $(\bar{s}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu d_R)$ | C |
| V1ddLR_2322 | $(\bar{s}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu s_R)$ | C |
| V1ddLR_2333 | $(\bar{s}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu b_R)$ | C |
| V1ddLR_3323 | $(\bar{b}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| V8ddLR_1123 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{s}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_1231 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{b}_R\gamma_\mu T^A d_R)$ | C |
| V8ddLR_1321 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A d_R)$ | C |
| V8ddLR_2223 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_2311 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | C |
| V8ddLR_2322 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_2333 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_3323 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A b_R)$ | C |
| V1udduLR_1231 | $(\bar{u}_L\gamma^\mu s_L)(\bar{b}_R\gamma_\mu u_R)$ | C |
| V1udduLR_1321 | $(\bar{u}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu u_R)$ | C |
| V1udduLR_2232 | $(\bar{c}_L\gamma^\mu s_L)(\bar{b}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2322 | $(\bar{c}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu c_R)$ | C |
| V8udduLR_1231 | $(\bar{u}_L\gamma^\mu T^A s_L)(\bar{b}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_1321 | $(\bar{u}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_2232 | $(\bar{c}_L\gamma^\mu T^A s_L)(\bar{b}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2322 | $(\bar{c}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A c_R)$ | C |
| SedRL_1123 | $(\bar{e}_L e_R)(\bar{s}_R b_L)$ | C |
| SedRL_1132 | $(\bar{e}_L e_R)(\bar{b}_R s_L)$ | C |
| SedRL_2223 | $(\bar{\mu}_L\mu_R)(\bar{s}_R b_L)$ | C |
| SedRL_2232 | $(\bar{\mu}_L\mu_R)(\bar{b}_R s_L)$ | C |
| SedRL_3323 | $(\bar{\tau}_L\tau_R)(\bar{s}_R b_L)$ | C |
| SedRL_3332 | $(\bar{\tau}_L\tau_R)(\bar{b}_R s_L)$ | C |
| SedRR_1123 | $(\bar{e}_L e_R)(\bar{s}_L b_R)$ | C |
| SedRR_1132 | $(\bar{e}_L e_R)(\bar{b}_L s_R)$ | C |
| SedRR_2223 | $(\bar{\mu}_L\mu_R)(\bar{s}_L b_R)$ | C |
| SedRR_2232 | $(\bar{\mu}_L\mu_R)(\bar{b}_L s_R)$ | C |
| SedRR_3323 | $(\bar{\tau}_L\tau_R)(\bar{s}_L b_R)$ | C |
| SedRR_3332 | $(\bar{\tau}_L\tau_R)(\bar{b}_L s_R)$ | C |
| TedRR_1123 | $(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_1132 | $(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{b}_L\sigma_{\mu\nu}s_R)$ | C |

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| WC name | Operator | Type |
|---|---|---|
| TedRR_2223 | $(\bar{\mu}_L\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_2232 | $(\bar{\mu}_L\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}s_R)$ | C |
| TedRR_3323 | $(\bar{\tau}_L\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_3332 | $(\bar{\tau}_L\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}s_R)$ | C |
| S1udRR_1123 | $(\bar{u}_Lu_R)(\bar{s}_Lb_R)$ | C |
| S1udRR_1132 | $(\bar{u}_Lu_R)(\bar{b}_Ls_R)$ | C |
| S1udRR_2223 | $(\bar{c}_Lc_R)(\bar{s}_Lb_R)$ | C |
| S1udRR_2232 | $(\bar{c}_Lc_R)(\bar{b}_Ls_R)$ | C |
| S8udRR_1123 | $(\bar{u}_LT^Au_R)(\bar{s}_LT^Ab_R)$ | C |
| S8udRR_1132 | $(\bar{u}_LT^Au_R)(\bar{b}_LT^As_R)$ | C |
| S8udRR_2223 | $(\bar{c}_LT^Ac_R)(\bar{s}_LT^Ab_R)$ | C |
| S8udRR_2232 | $(\bar{c}_LT^Ac_R)(\bar{b}_LT^As_R)$ | C |
| S1ddRR_1123 | $(\bar{d}_Ld_R)(\bar{s}_Lb_R)$ | C |
| S1ddRR_1132 | $(\bar{d}_Ld_R)(\bar{b}_Ls_R)$ | C |
| S1ddRR_1231 | $(\bar{d}_Ls_R)(\bar{b}_Ld_R)$ | C |
| S1ddRR_1321 | $(\bar{d}_Lb_R)(\bar{s}_Ld_R)$ | C |
| S1ddRR_2223 | $(\bar{s}_Ls_R)(\bar{s}_Lb_R)$ | C |
| S1ddRR_2232 | $(\bar{s}_Ls_R)(\bar{b}_Ls_R)$ | C |
| S1ddRR_2333 | $(\bar{s}_Lb_R)(\bar{b}_Lb_R)$ | C |
| S1ddRR_3233 | $(\bar{b}_Ls_R)(\bar{b}_Lb_R)$ | C |
| S8ddRR_1123 | $(\bar{d}_LT^Ad_R)(\bar{s}_LT^Ab_R)$ | C |
| S8ddRR_1132 | $(\bar{d}_LT^Ad_R)(\bar{b}_LT^As_R)$ | C |
| S8ddRR_1231 | $(\bar{d}_LT^As_R)(\bar{b}_LT^Ad_R)$ | C |
| S8ddRR_1321 | $(\bar{d}_LT^Ab_R)(\bar{s}_LT^Ad_R)$ | C |
| S8ddRR_2223 | $(\bar{s}_LT^As_R)(\bar{s}_LT^Ab_R)$ | C |
| S8ddRR_2232 | $(\bar{s}_LT^As_R)(\bar{b}_LT^As_R)$ | C |
| S8ddRR_2333 | $(\bar{s}_LT^Ab_R)(\bar{b}_LT^Ab_R)$ | C |
| S8ddRR_3233 | $(\bar{b}_LT^As_R)(\bar{b}_LT^Ab_R)$ | C |
| S1udduRR_1231 | $(\bar{u}_Ls_R)(\bar{b}_Lu_R)$ | C |
| S1udduRR_1321 | $(\bar{u}_Lb_R)(\bar{s}_Lu_R)$ | C |
| S1udduRR_2232 | $(\bar{c}_Ls_R)(\bar{b}_Lc_R)$ | C |
| S1udduRR_2322 | $(\bar{c}_Lb_R)(\bar{s}_Lc_R)$ | C |
| S8udduRR_1231 | $(\bar{u}_LT^As_R)(\bar{b}_LT^Au_R)$ | C |
| S8udduRR_1321 | $(\bar{u}_LT^Ab_R)(\bar{s}_LT^Au_R)$ | C |
| S8udduRR_2232 | $(\bar{c}_LT^As_R)(\bar{b}_LT^Ac_R)$ | C |
| S8udduRR_2322 | $(\bar{c}_LT^Ab_R)(\bar{s}_LT^Ac_R)$ | C |

db

| WC name | Operator | Type |
|---|---|---|
| dgamma_13 | $\bar{d}_L\sigma^{\mu\nu}b_R\,F_{\mu\nu}$ | C |

| WC name | Operator | Type |
|---|---|---|
| dgamma_31 | $\bar{b}_L \sigma^{\mu\nu} d_R \, F_{\mu\nu}$ | C |
| dG_13 | $\bar{d}_L \sigma^{\mu\nu} T^A b_R \, G^A_{\mu\nu}$ | C |
| dG_31 | $\bar{b}_L \sigma^{\mu\nu} T^A d_R \, G^A_{\mu\nu}$ | C |
| VedLL_1113 | $(\bar{e}_L \gamma^\mu e_L)(\bar{d}_L \gamma_\mu b_L)$ | C |
| VedLL_2213 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{d}_L \gamma_\mu b_L)$ | C |
| VedLL_3313 | $(\bar{\tau}_L \gamma^\mu \tau_L)(\bar{d}_L \gamma_\mu b_L)$ | C |
| VddLL_1113 | $(\bar{d}_L \gamma^\mu d_L)(\bar{d}_L \gamma_\mu b_L)$ | C |
| VddLL_1223 | $(\bar{d}_L \gamma^\mu s_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| VddLL_1322 | $(\bar{d}_L \gamma^\mu b_L)(\bar{s}_L \gamma_\mu s_L)$ | C |
| VddLL_1333 | $(\bar{d}_L \gamma^\mu b_L)(\bar{b}_L \gamma_\mu b_L)$ | C |
| V1udLL_1113 | $(\bar{u}_L \gamma^\mu u_L)(\bar{d}_L \gamma_\mu b_L)$ | C |
| V1udLL_2213 | $(\bar{c}_L \gamma^\mu c_L)(\bar{d}_L \gamma_\mu b_L)$ | C |
| V8udLL_1113 | $(\bar{u}_L \gamma^\mu T^A u_L)(\bar{d}_L \gamma_\mu T^A b_L)$ | C |
| V8udLL_2213 | $(\bar{c}_L \gamma^\mu T^A c_L)(\bar{d}_L \gamma_\mu T^A b_L)$ | C |
| VedRR_1113 | $(\bar{e}_R \gamma^\mu e_R)(\bar{d}_R \gamma_\mu b_R)$ | C |
| VedRR_2213 | $(\bar{\mu}_R \gamma^\mu \mu_R)(\bar{d}_R \gamma_\mu b_R)$ | C |
| VedRR_3313 | $(\bar{\tau}_R \gamma^\mu \tau_R)(\bar{d}_R \gamma_\mu b_R)$ | C |
| VddRR_1113 | $(\bar{d}_R \gamma^\mu d_R)(\bar{d}_R \gamma_\mu b_R)$ | C |
| VddRR_1223 | $(\bar{d}_R \gamma^\mu s_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VddRR_1322 | $(\bar{d}_R \gamma^\mu b_R)(\bar{s}_R \gamma_\mu s_R)$ | C |
| VddRR_1333 | $(\bar{d}_R \gamma^\mu b_R)(\bar{b}_R \gamma_\mu b_R)$ | C |
| V1udRR_1113 | $(\bar{u}_R \gamma^\mu u_R)(\bar{d}_R \gamma_\mu b_R)$ | C |
| V1udRR_2213 | $(\bar{c}_R \gamma^\mu c_R)(\bar{d}_R \gamma_\mu b_R)$ | C |
| V8udRR_1113 | $(\bar{u}_R \gamma^\mu T^A u_R)(\bar{d}_R \gamma_\mu T^A b_R)$ | C |
| V8udRR_2213 | $(\bar{c}_R \gamma^\mu T^A c_R)(\bar{d}_R \gamma_\mu T^A b_R)$ | C |
| VedLR_1113 | $(\bar{e}_L \gamma^\mu e_L)(\bar{d}_R \gamma_\mu b_R)$ | C |
| VedLR_2213 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{d}_R \gamma_\mu b_R)$ | C |
| VedLR_3313 | $(\bar{\tau}_L \gamma^\mu \tau_L)(\bar{d}_R \gamma_\mu b_R)$ | C |
| VdeLR_1311 | $(\bar{d}_L \gamma^\mu b_L)(\bar{e}_R \gamma_\mu e_R)$ | C |
| VdeLR_1322 | $(\bar{d}_L \gamma^\mu b_L)(\bar{\mu}_R \gamma_\mu \mu_R)$ | C |
| VdeLR_1333 | $(\bar{d}_L \gamma^\mu b_L)(\bar{\tau}_R \gamma_\mu \tau_R)$ | C |
| V1udLR_1113 | $(\bar{u}_L \gamma^\mu u_L)(\bar{d}_R \gamma_\mu b_R)$ | C |
| V1udLR_2213 | $(\bar{c}_L \gamma^\mu c_L)(\bar{d}_R \gamma_\mu b_R)$ | C |
| V8udLR_1113 | $(\bar{u}_L \gamma^\mu T^A u_L)(\bar{d}_R \gamma_\mu T^A b_R)$ | C |
| V8udLR_2213 | $(\bar{c}_L \gamma^\mu T^A c_L)(\bar{d}_R \gamma_\mu T^A b_R)$ | C |
| V1duLR_1311 | $(\bar{d}_L \gamma^\mu b_L)(\bar{u}_R \gamma_\mu u_R)$ | C |
| V1duLR_1322 | $(\bar{d}_L \gamma^\mu b_L)(\bar{c}_R \gamma_\mu c_R)$ | C |
| V8duLR_1311 | $(\bar{d}_L \gamma^\mu T^A b_L)(\bar{u}_R \gamma_\mu T^A u_R)$ | C |
| V8duLR_1322 | $(\bar{d}_L \gamma^\mu T^A b_L)(\bar{c}_R \gamma_\mu T^A c_R)$ | C |
| V1ddLR_1113 | $(\bar{d}_L \gamma^\mu d_L)(\bar{d}_R \gamma_\mu b_R)$ | C |
| V1ddLR_1223 | $(\bar{d}_L \gamma^\mu s_L)(\bar{s}_R \gamma_\mu b_R)$ | C |
| V1ddLR_1311 | $(\bar{d}_L \gamma^\mu b_L)(\bar{d}_R \gamma_\mu d_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| V1ddLR_1322 | $(\bar{d}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu s_R)$ | C |
| V1ddLR_1333 | $(\bar{d}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu b_R)$ | C |
| V1ddLR_2213 | $(\bar{s}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| V1ddLR_2312 | $(\bar{s}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V1ddLR_3313 | $(\bar{b}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| V8ddLR_1113 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_1223 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_1311 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | C |
| V8ddLR_1322 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_1333 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_2213 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_2312 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_3313 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A b_R)$ | C |
| V1udduLR_1131 | $(\bar{u}_L\gamma^\mu d_L)(\bar{b}_R\gamma_\mu u_R)$ | C |
| V1udduLR_1311 | $(\bar{u}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| V1udduLR_2132 | $(\bar{c}_L\gamma^\mu d_L)(\bar{b}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2312 | $(\bar{c}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu c_R)$ | C |
| V8udduLR_1131 | $(\bar{u}_L\gamma^\mu T^A d_L)(\bar{b}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_1311 | $(\bar{u}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_2132 | $(\bar{c}_L\gamma^\mu T^A d_L)(\bar{b}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2312 | $(\bar{c}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A c_R)$ | C |
| SedRL_1113 | $(\bar{e}_L e_R)(\bar{d}_R b_L)$ | C |
| SedRL_1131 | $(\bar{e}_L e_R)(\bar{b}_R d_L)$ | C |
| SedRL_2213 | $(\bar{\mu}_L \mu_R)(\bar{d}_R b_L)$ | C |
| SedRL_2231 | $(\bar{\mu}_L \mu_R)(\bar{b}_R d_L)$ | C |
| SedRL_3313 | $(\bar{\tau}_L \tau_R)(\bar{d}_R b_L)$ | C |
| SedRL_3331 | $(\bar{\tau}_L \tau_R)(\bar{b}_R d_L)$ | C |
| SedRR_1113 | $(\bar{e}_L e_R)(\bar{d}_L b_R)$ | C |
| SedRR_1131 | $(\bar{e}_L e_R)(\bar{b}_L d_R)$ | C |
| SedRR_2213 | $(\bar{\mu}_L \mu_R)(\bar{d}_L b_R)$ | C |
| SedRR_2231 | $(\bar{\mu}_L \mu_R)(\bar{b}_L d_R)$ | C |
| SedRR_3313 | $(\bar{\tau}_L \tau_R)(\bar{d}_L b_R)$ | C |
| SedRR_3331 | $(\bar{\tau}_L \tau_R)(\bar{b}_L d_R)$ | C |
| TedRR_1113 | $(\bar{e}_L \sigma^{\mu\nu} e_R)(\bar{d}_L \sigma_{\mu\nu} b_R)$ | C |
| TedRR_1131 | $(\bar{e}_L \sigma^{\mu\nu} e_R)(\bar{b}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_2213 | $(\bar{\mu}_L \sigma^{\mu\nu} \mu_R)(\bar{d}_L \sigma_{\mu\nu} b_R)$ | C |
| TedRR_2231 | $(\bar{\mu}_L \sigma^{\mu\nu} \mu_R)(\bar{b}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_3313 | $(\bar{\tau}_L \sigma^{\mu\nu} \tau_R)(\bar{d}_L \sigma_{\mu\nu} b_R)$ | C |
| TedRR_3331 | $(\bar{\tau}_L \sigma^{\mu\nu} \tau_R)(\bar{b}_L \sigma_{\mu\nu} d_R)$ | C |
| S1udRR_1113 | $(\bar{u}_L u_R)(\bar{d}_L b_R)$ | C |
| S1udRR_1131 | $(\bar{u}_L u_R)(\bar{b}_L d_R)$ | C |
| S1udRR_2213 | $(\bar{c}_L c_R)(\bar{d}_L b_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| S1udRR_2231 | $(\bar{c}_L c_R)(\bar{b}_L d_R)$ | C |
| S8udRR_1113 | $(\bar{u}_L T^A u_R)(\bar{d}_L T^A b_R)$ | C |
| S8udRR_1131 | $(\bar{u}_L T^A u_R)(\bar{b}_L T^A d_R)$ | C |
| S8udRR_2213 | $(\bar{c}_L T^A c_R)(\bar{d}_L T^A b_R)$ | C |
| S8udRR_2231 | $(\bar{c}_L T^A c_R)(\bar{b}_L T^A d_R)$ | C |
| S1ddRR_1113 | $(\bar{d}_L d_R)(\bar{d}_L b_R)$ | C |
| S1ddRR_1131 | $(\bar{d}_L d_R)(\bar{b}_L d_R)$ | C |
| S1ddRR_1223 | $(\bar{d}_L s_R)(\bar{s}_L b_R)$ | C |
| S1ddRR_1322 | $(\bar{d}_L b_R)(\bar{s}_L s_R)$ | C |
| S1ddRR_1333 | $(\bar{d}_L b_R)(\bar{b}_L b_R)$ | C |
| S1ddRR_2132 | $(\bar{s}_L d_R)(\bar{b}_L s_R)$ | C |
| S1ddRR_2231 | $(\bar{s}_L s_R)(\bar{b}_L d_R)$ | C |
| S1ddRR_3133 | $(\bar{b}_L d_R)(\bar{b}_L b_R)$ | C |
| S8ddRR_1113 | $(\bar{d}_L T^A d_R)(\bar{d}_L T^A b_R)$ | C |
| S8ddRR_1131 | $(\bar{d}_L T^A d_R)(\bar{b}_L T^A d_R)$ | C |
| S8ddRR_1223 | $(\bar{d}_L T^A s_R)(\bar{s}_L T^A b_R)$ | C |
| S8ddRR_1322 | $(\bar{d}_L T^A b_R)(\bar{s}_L T^A s_R)$ | C |
| S8ddRR_1333 | $(\bar{d}_L T^A b_R)(\bar{b}_L T^A b_R)$ | C |
| S8ddRR_2132 | $(\bar{s}_L T^A d_R)(\bar{b}_L T^A s_R)$ | C |
| S8ddRR_2231 | $(\bar{s}_L T^A s_R)(\bar{b}_L T^A d_R)$ | C |
| S8ddRR_3133 | $(\bar{b}_L T^A d_R)(\bar{b}_L T^A b_R)$ | C |
| S1udduRR_1131 | $(\bar{u}_L d_R)(\bar{b}_L u_R)$ | C |
| S1udduRR_1311 | $(\bar{u}_L b_R)(\bar{d}_L u_R)$ | C |
| S1udduRR_2132 | $(\bar{c}_L d_R)(\bar{b}_L c_R)$ | C |
| S1udduRR_2312 | $(\bar{c}_L b_R)(\bar{d}_L c_R)$ | C |
| S8udduRR_1131 | $(\bar{u}_L T^A d_R)(\bar{b}_L T^A u_R)$ | C |
| S8udduRR_1311 | $(\bar{u}_L T^A b_R)(\bar{d}_L T^A u_R)$ | C |
| S8udduRR_2132 | $(\bar{c}_L T^A d_R)(\bar{b}_L T^A c_R)$ | C |
| S8udduRR_2312 | $(\bar{c}_L T^A b_R)(\bar{d}_L T^A c_R)$ | C |

**sd**

| WC name | Operator | Type |
|---|---|---|
| dgamma_12 | $\bar{d}_L \sigma^{\mu\nu} s_R \, F_{\mu\nu}$ | C |
| dgamma_21 | $\bar{s}_L \sigma^{\mu\nu} d_R \, F_{\mu\nu}$ | C |
| dG_12 | $\bar{d}_L \sigma^{\mu\nu} T^A s_R \, G^A_{\mu\nu}$ | C |
| dG_21 | $\bar{s}_L \sigma^{\mu\nu} T^A d_R \, G^A_{\mu\nu}$ | C |
| VedLL_1112 | $(\bar{e}_L \gamma^\mu e_L)(\bar{d}_L \gamma_\mu s_L)$ | C |
| VedLL_2212 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{d}_L \gamma_\mu s_L)$ | C |
| VedLL_3312 | $(\bar{\tau}_L \gamma^\mu \tau_L)(\bar{d}_L \gamma_\mu s_L)$ | C |
| VddLL_1112 | $(\bar{d}_L \gamma^\mu d_L)(\bar{d}_L \gamma_\mu s_L)$ | C |

| WC name | Operator | Type |
|---|---|---|
| VddLL_1222 | $(\bar{d}_L\gamma^\mu s_L)(\bar{s}_L\gamma_\mu s_L)$ | C |
| VddLL_1233 | $(\bar{d}_L\gamma^\mu s_L)(\bar{b}_L\gamma_\mu b_L)$ | C |
| VddLL_1332 | $(\bar{d}_L\gamma^\mu b_L)(\bar{b}_L\gamma_\mu s_L)$ | C |
| V1udLL_1112 | $(\bar{u}_L\gamma^\mu u_L)(\bar{d}_L\gamma_\mu s_L)$ | C |
| V1udLL_2212 | $(\bar{c}_L\gamma^\mu c_L)(\bar{d}_L\gamma_\mu s_L)$ | C |
| V8udLL_1112 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{d}_L\gamma_\mu T^A s_L)$ | C |
| V8udLL_2212 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{d}_L\gamma_\mu T^A s_L)$ | C |
| VedRR_1112 | $(\bar{e}_R\gamma^\mu e_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| VedRR_2212 | $(\bar{\mu}_R\gamma^\mu \mu_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| VedRR_3312 | $(\bar{\tau}_R\gamma^\mu \tau_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| VddRR_1112 | $(\bar{d}_R\gamma^\mu d_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| VddRR_1222 | $(\bar{d}_R\gamma^\mu s_R)(\bar{s}_R\gamma_\mu s_R)$ | C |
| VddRR_1233 | $(\bar{d}_R\gamma^\mu s_R)(\bar{b}_R\gamma_\mu b_R)$ | C |
| VddRR_1332 | $(\bar{d}_R\gamma^\mu b_R)(\bar{b}_R\gamma_\mu s_R)$ | C |
| V1udRR_1112 | $(\bar{u}_R\gamma^\mu u_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V1udRR_2212 | $(\bar{c}_R\gamma^\mu c_R)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V8udRR_1112 | $(\bar{u}_R\gamma^\mu T^A u_R)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| V8udRR_2212 | $(\bar{c}_R\gamma^\mu T^A c_R)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| VedLR_1112 | $(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| VedLR_2212 | $(\bar{\mu}_L\gamma^\mu \mu_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| VedLR_3312 | $(\bar{\tau}_L\gamma^\mu \tau_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| VdeLR_1211 | $(\bar{d}_L\gamma^\mu s_L)(\bar{e}_R\gamma_\mu e_R)$ | C |
| VdeLR_1222 | $(\bar{d}_L\gamma^\mu s_L)(\bar{\mu}_R\gamma_\mu \mu_R)$ | C |
| VdeLR_1233 | $(\bar{d}_L\gamma^\mu s_L)(\bar{\tau}_R\gamma_\mu \tau_R)$ | C |
| V1udLR_1112 | $(\bar{u}_L\gamma^\mu u_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V1udLR_2212 | $(\bar{c}_L\gamma^\mu c_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V8udLR_1112 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| V8udLR_2212 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| V1duLR_1211 | $(\bar{d}_L\gamma^\mu s_L)(\bar{u}_R\gamma_\mu u_R)$ | C |
| V1duLR_1222 | $(\bar{d}_L\gamma^\mu s_L)(\bar{c}_R\gamma_\mu c_R)$ | C |
| V8duLR_1211 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{u}_R\gamma_\mu T^A u_R)$ | C |
| V8duLR_1222 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{c}_R\gamma_\mu T^A c_R)$ | C |
| V1ddLR_1112 | $(\bar{d}_L\gamma^\mu d_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V1ddLR_1211 | $(\bar{d}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu d_R)$ | C |
| V1ddLR_1222 | $(\bar{d}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu s_R)$ | C |
| V1ddLR_1233 | $(\bar{d}_L\gamma^\mu s_L)(\bar{b}_R\gamma_\mu b_R)$ | C |
| V1ddLR_1332 | $(\bar{d}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu s_R)$ | C |
| V1ddLR_2212 | $(\bar{s}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V1ddLR_2331 | $(\bar{s}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu d_R)$ | C |
| V1ddLR_3312 | $(\bar{b}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu s_R)$ | C |
| V8ddLR_1112 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_1211 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| V8ddLR_1222 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_1233 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | C |
| V8ddLR_1332 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_2212 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_2331 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A d_R)$ | C |
| V8ddLR_3312 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A s_R)$ | C |
| V1udduLR_1121 | $(\bar{u}_L\gamma^\mu d_L)(\bar{s}_R\gamma_\mu u_R)$ | C |
| V1udduLR_1211 | $(\bar{u}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| V1udduLR_2122 | $(\bar{c}_L\gamma^\mu d_L)(\bar{s}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2212 | $(\bar{c}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu c_R)$ | C |
| V8udduLR_1121 | $(\bar{u}_L\gamma^\mu T^A d_L)(\bar{s}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_1211 | $(\bar{u}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_2122 | $(\bar{c}_L\gamma^\mu T^A d_L)(\bar{s}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2212 | $(\bar{c}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A c_R)$ | C |
| SedRL_1112 | $(\bar{e}_L e_R)(\bar{d}_R s_L)$ | C |
| SedRL_1121 | $(\bar{e}_L e_R)(\bar{s}_R d_L)$ | C |
| SedRL_2212 | $(\bar{\mu}_L \mu_R)(\bar{d}_R s_L)$ | C |
| SedRL_2221 | $(\bar{\mu}_L \mu_R)(\bar{s}_R d_L)$ | C |
| SedRL_3312 | $(\bar{\tau}_L \tau_R)(\bar{d}_R s_L)$ | C |
| SedRL_3321 | $(\bar{\tau}_L \tau_R)(\bar{s}_R d_L)$ | C |
| SedRR_1112 | $(\bar{e}_L e_R)(\bar{d}_L s_R)$ | C |
| SedRR_1121 | $(\bar{e}_L e_R)(\bar{s}_L d_R)$ | C |
| SedRR_2212 | $(\bar{\mu}_L \mu_R)(\bar{d}_L s_R)$ | C |
| SedRR_2221 | $(\bar{\mu}_L \mu_R)(\bar{s}_L d_R)$ | C |
| SedRR_3312 | $(\bar{\tau}_L \tau_R)(\bar{d}_L s_R)$ | C |
| SedRR_3321 | $(\bar{\tau}_L \tau_R)(\bar{s}_L d_R)$ | C |
| TedRR_1112 | $(\bar{e}_L \sigma^{\mu\nu} e_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_1121 | $(\bar{e}_L \sigma^{\mu\nu} e_R)(\bar{s}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_2212 | $(\bar{\mu}_L \sigma^{\mu\nu} \mu_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_2221 | $(\bar{\mu}_L \sigma^{\mu\nu} \mu_R)(\bar{s}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_3312 | $(\bar{\tau}_L \sigma^{\mu\nu} \tau_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_3321 | $(\bar{\tau}_L \sigma^{\mu\nu} \tau_R)(\bar{s}_L \sigma_{\mu\nu} d_R)$ | C |
| S1udRR_1112 | $(\bar{u}_L u_R)(\bar{d}_L s_R)$ | C |
| S1udRR_1121 | $(\bar{u}_L u_R)(\bar{s}_L d_R)$ | C |
| S1udRR_2212 | $(\bar{c}_L c_R)(\bar{d}_L s_R)$ | C |
| S1udRR_2221 | $(\bar{c}_L c_R)(\bar{s}_L d_R)$ | C |
| S8udRR_1112 | $(\bar{u}_L T^A u_R)(\bar{d}_L T^A s_R)$ | C |
| S8udRR_1121 | $(\bar{u}_L T^A u_R)(\bar{s}_L T^A d_R)$ | C |
| S8udRR_2212 | $(\bar{c}_L T^A c_R)(\bar{d}_L T^A s_R)$ | C |
| S8udRR_2221 | $(\bar{c}_L T^A c_R)(\bar{s}_L T^A d_R)$ | C |
| S1ddRR_1112 | $(\bar{d}_L d_R)(\bar{d}_L s_R)$ | C |
| S1ddRR_1121 | $(\bar{d}_L d_R)(\bar{s}_L d_R)$ | C |
| S1ddRR_1222 | $(\bar{d}_L s_R)(\bar{s}_L s_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| S1ddRR_1233 | $(\bar{d}_L s_R)(\bar{b}_L b_R)$ | C |
| S1ddRR_1332 | $(\bar{d}_L b_R)(\bar{b}_L s_R)$ | C |
| S1ddRR_2122 | $(\bar{s}_L d_R)(\bar{s}_L s_R)$ | C |
| S1ddRR_2133 | $(\bar{s}_L d_R)(\bar{b}_L b_R)$ | C |
| S1ddRR_2331 | $(\bar{s}_L b_R)(\bar{b}_L d_R)$ | C |
| S8ddRR_1112 | $(\bar{d}_L T^A d_R)(\bar{d}_L T^A s_R)$ | C |
| S8ddRR_1121 | $(\bar{d}_L T^A d_R)(\bar{s}_L T^A d_R)$ | C |
| S8ddRR_1222 | $(\bar{d}_L T^A s_R)(\bar{s}_L T^A s_R)$ | C |
| S8ddRR_1233 | $(\bar{d}_L T^A s_R)(\bar{b}_L T^A b_R)$ | C |
| S8ddRR_1332 | $(\bar{d}_L T^A b_R)(\bar{b}_L T^A s_R)$ | C |
| S8ddRR_2122 | $(\bar{s}_L T^A d_R)(\bar{s}_L T^A s_R)$ | C |
| S8ddRR_2133 | $(\bar{s}_L T^A d_R)(\bar{b}_L T^A b_R)$ | C |
| S8ddRR_2331 | $(\bar{s}_L T^A b_R)(\bar{b}_L T^A d_R)$ | C |
| S1udduRR_1121 | $(\bar{u}_L d_R)(\bar{s}_L u_R)$ | C |
| S1udduRR_1211 | $(\bar{u}_L s_R)(\bar{d}_L u_R)$ | C |
| S1udduRR_2122 | $(\bar{c}_L d_R)(\bar{s}_L c_R)$ | C |
| S1udduRR_2212 | $(\bar{c}_L s_R)(\bar{d}_L c_R)$ | C |
| S8udduRR_1121 | $(\bar{u}_L T^A d_R)(\bar{s}_L T^A u_R)$ | C |
| S8udduRR_1211 | $(\bar{u}_L T^A s_R)(\bar{d}_L T^A u_R)$ | C |
| S8udduRR_2122 | $(\bar{c}_L T^A d_R)(\bar{s}_L T^A c_R)$ | C |
| S8udduRR_2212 | $(\bar{c}_L T^A s_R)(\bar{d}_L T^A c_R)$ | C |

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| WC name | Operator | Type |
|---|---|---|
| ugamma_12 | $\bar{u}_L \sigma^{\mu\nu} c_R \, F_{\mu\nu}$ | C |
| ugamma_21 | $\bar{c}_L \sigma^{\mu\nu} u_R \, F_{\mu\nu}$ | C |
| uG_12 | $\bar{u}_L \sigma^{\mu\nu} T^A c_R \, G^A_{\mu\nu}$ | C |
| uG_21 | $\bar{c}_L \sigma^{\mu\nu} T^A u_R \, G^A_{\mu\nu}$ | C |
| VeuLL_1112 | $(\bar{e}_L \gamma^\mu e_L)(\bar{u}_L \gamma_\mu c_L)$ | C |
| VeuLL_2212 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{u}_L \gamma_\mu c_L)$ | C |
| VeuLL_3312 | $(\bar{\tau}_L \gamma^\mu \tau_L)(\bar{u}_L \gamma_\mu c_L)$ | C |
| VuuLL_1112 | $(\bar{u}_L \gamma^\mu u_L)(\bar{u}_L \gamma_\mu c_L)$ | C |
| VuuLL_1222 | $(\bar{u}_L \gamma^\mu c_L)(\bar{c}_L \gamma_\mu c_L)$ | C |
| V1udLL_1211 | $(\bar{u}_L \gamma^\mu c_L)(\bar{d}_L \gamma_\mu d_L)$ | C |
| V1udLL_1222 | $(\bar{u}_L \gamma^\mu c_L)(\bar{s}_L \gamma_\mu s_L)$ | C |
| V1udLL_1233 | $(\bar{u}_L \gamma^\mu c_L)(\bar{b}_L \gamma_\mu b_L)$ | C |
| V8udLL_1211 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{d}_L \gamma_\mu T^A d_L)$ | C |
| V8udLL_1222 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{s}_L \gamma_\mu T^A s_L)$ | C |
| V8udLL_1233 | $(\bar{u}_L \gamma^\mu T^A c_L)(\bar{b}_L \gamma_\mu T^A b_L)$ | C |
| VeuRR_1112 | $(\bar{e}_R \gamma^\mu e_R)(\bar{u}_R \gamma_\mu c_R)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| VeuRR_2212 | $(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VeuRR_3312 | $(\bar{\tau}_R\gamma^\mu\tau_R)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VuuRR_1112 | $(\bar{u}_R\gamma^\mu u_R)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VuuRR_1222 | $(\bar{u}_R\gamma^\mu c_R)(\bar{c}_R\gamma_\mu c_R)$ | C |
| V1udRR_1211 | $(\bar{u}_R\gamma^\mu c_R)(\bar{d}_R\gamma_\mu d_R)$ | C |
| V1udRR_1222 | $(\bar{u}_R\gamma^\mu c_R)(\bar{s}_R\gamma_\mu s_R)$ | C |
| V1udRR_1233 | $(\bar{u}_R\gamma^\mu c_R)(\bar{b}_R\gamma_\mu b_R)$ | C |
| V8udRR_1211 | $(\bar{u}_R\gamma^\mu T^A c_R)(\bar{d}_R\gamma_\mu T^A d_R)$ | C |
| V8udRR_1222 | $(\bar{u}_R\gamma^\mu T^A c_R)(\bar{s}_R\gamma_\mu T^A s_R)$ | C |
| V8udRR_1233 | $(\bar{u}_R\gamma^\mu T^A c_R)(\bar{b}_R\gamma_\mu T^A b_R)$ | C |
| VeuLR_1112 | $(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VeuLR_2212 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VeuLR_3312 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VueLR_1211 | $(\bar{u}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R)$ | C |
| VueLR_1222 | $(\bar{u}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | C |
| VueLR_1233 | $(\bar{u}_L\gamma^\mu c_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | C |
| V1uuLR_1112 | $(\bar{u}_L\gamma^\mu u_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| V1uuLR_1211 | $(\bar{u}_L\gamma^\mu c_L)(\bar{u}_R\gamma_\mu u_R)$ | C |
| V1uuLR_1222 | $(\bar{u}_L\gamma^\mu c_L)(\bar{c}_R\gamma_\mu c_R)$ | C |
| V1uuLR_2212 | $(\bar{c}_L\gamma^\mu c_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| V8uuLR_1112 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{u}_R\gamma_\mu T^A c_R)$ | C |
| V8uuLR_1211 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{u}_R\gamma_\mu T^A u_R)$ | C |
| V8uuLR_1222 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{c}_R\gamma_\mu T^A c_R)$ | C |
| V8uuLR_2212 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{u}_R\gamma_\mu T^A c_R)$ | C |
| V1udLR_1211 | $(\bar{u}_L\gamma^\mu c_L)(\bar{d}_R\gamma_\mu d_R)$ | C |
| V1udLR_1222 | $(\bar{u}_L\gamma^\mu c_L)(\bar{s}_R\gamma_\mu s_R)$ | C |
| V1udLR_1233 | $(\bar{u}_L\gamma^\mu c_L)(\bar{b}_R\gamma_\mu b_R)$ | C |
| V8udLR_1211 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | C |
| V8udLR_1222 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | C |
| V8udLR_1233 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | C |
| V1duLR_1112 | $(\bar{d}_L\gamma^\mu d_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| V1duLR_2212 | $(\bar{s}_L\gamma^\mu s_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| V1duLR_3312 | $(\bar{b}_L\gamma^\mu b_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| V8duLR_1112 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{u}_R\gamma_\mu T^A c_R)$ | C |
| V8duLR_2212 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{u}_R\gamma_\mu T^A c_R)$ | C |
| V8duLR_3312 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{u}_R\gamma_\mu T^A c_R)$ | C |
| V1udduLR_1112 | $(\bar{u}_L\gamma^\mu d_L)(\bar{d}_R\gamma_\mu c_R)$ | C |
| V1udduLR_1222 | $(\bar{u}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu c_R)$ | C |
| V1udduLR_1332 | $(\bar{u}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2111 | $(\bar{c}_L\gamma^\mu d_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| V1udduLR_2221 | $(\bar{c}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu u_R)$ | C |
| V1udduLR_2331 | $(\bar{c}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu u_R)$ | C |
| V8udduLR_1112 | $(\bar{u}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A c_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| V8udduLR_1222 | $(\bar{u}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_1332 | $(\bar{u}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2111 | $(\bar{c}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_2221 | $(\bar{c}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_2331 | $(\bar{c}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A u_R)$ | C |
| SeuRL_1112 | $(\bar{e}_L e_R)(\bar{u}_R c_L)$ | C |
| SeuRL_1121 | $(\bar{e}_L e_R)(\bar{c}_R u_L)$ | C |
| SeuRL_2212 | $(\bar{\mu}_L \mu_R)(\bar{u}_R c_L)$ | C |
| SeuRL_2221 | $(\bar{\mu}_L \mu_R)(\bar{c}_R u_L)$ | C |
| SeuRL_3312 | $(\bar{\tau}_L \tau_R)(\bar{u}_R c_L)$ | C |
| SeuRL_3321 | $(\bar{\tau}_L \tau_R)(\bar{c}_R u_L)$ | C |
| SeuRR_1112 | $(\bar{e}_L e_R)(\bar{u}_L c_R)$ | C |
| SeuRR_1121 | $(\bar{e}_L e_R)(\bar{c}_L u_R)$ | C |
| SeuRR_2212 | $(\bar{\mu}_L \mu_R)(\bar{u}_L c_R)$ | C |
| SeuRR_2221 | $(\bar{\mu}_L \mu_R)(\bar{c}_L u_R)$ | C |
| SeuRR_3312 | $(\bar{\tau}_L \tau_R)(\bar{u}_L c_R)$ | C |
| SeuRR_3321 | $(\bar{\tau}_L \tau_R)(\bar{c}_L u_R)$ | C |
| TeuRR_1112 | $(\bar{e}_L \sigma^{\mu\nu} e_R)(\bar{u}_L \sigma_{\mu\nu} c_R)$ | C |
| TeuRR_1121 | $(\bar{e}_L \sigma^{\mu\nu} e_R)(\bar{c}_L \sigma_{\mu\nu} u_R)$ | C |
| TeuRR_2212 | $(\bar{\mu}_L \sigma^{\mu\nu} \mu_R)(\bar{u}_L \sigma_{\mu\nu} c_R)$ | C |
| TeuRR_2221 | $(\bar{\mu}_L \sigma^{\mu\nu} \mu_R)(\bar{c}_L \sigma_{\mu\nu} u_R)$ | C |
| TeuRR_3312 | $(\bar{\tau}_L \sigma^{\mu\nu} \tau_R)(\bar{u}_L \sigma_{\mu\nu} c_R)$ | C |
| TeuRR_3321 | $(\bar{\tau}_L \sigma^{\mu\nu} \tau_R)(\bar{c}_L \sigma_{\mu\nu} u_R)$ | C |
| S1uuRR_1112 | $(\bar{u}_L u_R)(\bar{u}_L c_R)$ | C |
| S1uuRR_1121 | $(\bar{u}_L u_R)(\bar{c}_L u_R)$ | C |
| S1uuRR_1222 | $(\bar{u}_L c_R)(\bar{c}_L c_R)$ | C |
| S1uuRR_2122 | $(\bar{c}_L u_R)(\bar{c}_L c_R)$ | C |
| S8uuRR_1112 | $(\bar{u}_L T^A u_R)(\bar{u}_L T^A c_R)$ | C |
| S8uuRR_1121 | $(\bar{u}_L T^A u_R)(\bar{c}_L T^A u_R)$ | C |
| S8uuRR_1222 | $(\bar{u}_L T^A c_R)(\bar{c}_L T^A c_R)$ | C |
| S8uuRR_2122 | $(\bar{c}_L T^A u_R)(\bar{c}_L T^A c_R)$ | C |
| S1udRR_1211 | $(\bar{u}_L c_R)(\bar{d}_L d_R)$ | C |
| S1udRR_1222 | $(\bar{u}_L c_R)(\bar{s}_L s_R)$ | C |
| S1udRR_1233 | $(\bar{u}_L c_R)(\bar{b}_L b_R)$ | C |
| S1udRR_2111 | $(\bar{c}_L u_R)(\bar{d}_L d_R)$ | C |
| S1udRR_2122 | $(\bar{c}_L u_R)(\bar{s}_L s_R)$ | C |
| S1udRR_2133 | $(\bar{c}_L u_R)(\bar{b}_L b_R)$ | C |
| S8udRR_1211 | $(\bar{u}_L T^A c_R)(\bar{d}_L T^A d_R)$ | C |
| S8udRR_1222 | $(\bar{u}_L T^A c_R)(\bar{s}_L T^A s_R)$ | C |
| S8udRR_1233 | $(\bar{u}_L T^A c_R)(\bar{b}_L T^A b_R)$ | C |
| S8udRR_2111 | $(\bar{c}_L T^A u_R)(\bar{d}_L T^A d_R)$ | C |
| S8udRR_2122 | $(\bar{c}_L T^A u_R)(\bar{s}_L T^A s_R)$ | C |
| S8udRR_2133 | $(\bar{c}_L T^A u_R)(\bar{b}_L T^A b_R)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| S1udduRR_1112 | $(\bar{u}_L d_R)(\bar{d}_L c_R)$ | C |
| S1udduRR_1222 | $(\bar{u}_L s_R)(\bar{s}_L c_R)$ | C |
| S1udduRR_1332 | $(\bar{u}_L b_R)(\bar{b}_L c_R)$ | C |
| S1udduRR_2111 | $(\bar{c}_L d_R)(\bar{d}_L u_R)$ | C |
| S1udduRR_2221 | $(\bar{c}_L s_R)(\bar{s}_L u_R)$ | C |
| S1udduRR_2331 | $(\bar{c}_L b_R)(\bar{b}_L u_R)$ | C |
| S8udduRR_1112 | $(\bar{u}_L T^A d_R)(\bar{d}_L T^A c_R)$ | C |
| S8udduRR_1222 | $(\bar{u}_L T^A s_R)(\bar{s}_L T^A c_R)$ | C |
| S8udduRR_1332 | $(\bar{u}_L T^A b_R)(\bar{b}_L T^A c_R)$ | C |
| S8udduRR_2111 | $(\bar{c}_L T^A d_R)(\bar{d}_L T^A u_R)$ | C |
| S8udduRR_2221 | $(\bar{c}_L T^A s_R)(\bar{s}_L T^A u_R)$ | C |
| S8udduRR_2331 | $(\bar{c}_L T^A b_R)(\bar{b}_L T^A u_R)$ | C |

**sbemu**

| WC name | Operator | Type |
| --- | --- | --- |
| VedLL_1223 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{s}_L \gamma_\mu b_L)$ | C |
| VedRR_1223 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VedLR_1223 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{s}_R \gamma_\mu b_R)$ | C |
| VdeLR_2312 | $(\bar{s}_L \gamma^\mu b_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| SedRL_1223 | $(\bar{e}_L \mu_R)(\bar{s}_R b_L)$ | C |
| SedRL_2132 | $(\bar{\mu}_L e_R)(\bar{b}_R s_L)$ | C |
| SedRR_1223 | $(\bar{e}_L \mu_R)(\bar{s}_L b_R)$ | C |
| SedRR_2132 | $(\bar{\mu}_L e_R)(\bar{b}_L s_R)$ | C |
| TedRR_1223 | $(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{s}_L \sigma_{\mu\nu} b_R)$ | C |
| TedRR_2132 | $(\bar{\mu}_L \sigma^{\mu\nu} e_R)(\bar{b}_L \sigma_{\mu\nu} s_R)$ | C |

**sbmue**

| WC name | Operator | Type |
| --- | --- | --- |
| VedLL_1232 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{b}_L \gamma_\mu s_L)$ | C |
| VedRR_1232 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{b}_R \gamma_\mu s_R)$ | C |
| VedLR_1232 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{b}_R \gamma_\mu s_R)$ | C |
| VdeLR_2321 | $(\bar{s}_L \gamma^\mu b_L)(\bar{\mu}_R \gamma_\mu e_R)$ | C |
| SedRL_1232 | $(\bar{e}_L \mu_R)(\bar{b}_R s_L)$ | C |
| SedRL_2123 | $(\bar{\mu}_L e_R)(\bar{s}_R b_L)$ | C |
| SedRR_1232 | $(\bar{e}_L \mu_R)(\bar{b}_L s_R)$ | C |
| SedRR_2123 | $(\bar{\mu}_L e_R)(\bar{s}_L b_R)$ | C |
| TedRR_1232 | $(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{b}_L \sigma_{\mu\nu} s_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| TedRR_2123 | $(\bar{\mu}_L\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}b_R)$ | C |

**sbetau**

| WC name | Operator | Type |
|---|---|---|
| VedLL_1323 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{s}_L\gamma_\mu b_L)$ | C |
| VedRR_1323 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{s}_R\gamma_\mu b_R)$ | C |
| VedLR_1323 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| VdeLR_2313 | $(\bar{s}_L\gamma^\mu b_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| SedRL_1323 | $(\bar{e}_L\tau_R)(\bar{s}_R b_L)$ | C |
| SedRL_3132 | $(\bar{\tau}_L e_R)(\bar{b}_R s_L)$ | C |
| SedRR_1323 | $(\bar{e}_L\tau_R)(\bar{s}_L b_R)$ | C |
| SedRR_3132 | $(\bar{\tau}_L e_R)(\bar{b}_L s_R)$ | C |
| TedRR_1323 | $(\bar{e}_L\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_3132 | $(\bar{\tau}_L\sigma^{\mu\nu}e_R)(\bar{b}_L\sigma_{\mu\nu}s_R)$ | C |

**sbtaue**

| WC name | Operator | Type |
|---|---|---|
| VedLL_1332 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{b}_L\gamma_\mu s_L)$ | C |
| VedRR_1332 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{b}_R\gamma_\mu s_R)$ | C |
| VedLR_1332 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{b}_R\gamma_\mu s_R)$ | C |
| VdeLR_2331 | $(\bar{s}_L\gamma^\mu b_L)(\bar{\tau}_R\gamma_\mu e_R)$ | C |
| SedRL_1332 | $(\bar{e}_L\tau_R)(\bar{b}_R s_L)$ | C |
| SedRL_3123 | $(\bar{\tau}_L e_R)(\bar{s}_R b_L)$ | C |
| SedRR_1332 | $(\bar{e}_L\tau_R)(\bar{b}_L s_R)$ | C |
| SedRR_3123 | $(\bar{\tau}_L e_R)(\bar{s}_L b_R)$ | C |
| TedRR_1332 | $(\bar{e}_L\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}s_R)$ | C |
| TedRR_3123 | $(\bar{\tau}_L\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}b_R)$ | C |

**sbmutau**

| WC name | Operator | Type |
|---|---|---|
| VedLL_2323 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{s}_L\gamma_\mu b_L)$ | C |
| VedRR_2323 | $(\bar{\mu}_R\gamma^\mu\tau_R)(\bar{s}_R\gamma_\mu b_R)$ | C |
| VedLR_2323 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{s}_R\gamma_\mu b_R)$ | C |
| VdeLR_2323 | $(\bar{s}_L\gamma^\mu b_L)(\bar{\mu}_R\gamma_\mu\tau_R)$ | C |
| SedRL_2323 | $(\bar{\mu}_L\tau_R)(\bar{s}_R b_L)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| SedRL_3232 | $(\bar{\tau}_L\mu_R)(\bar{b}_R s_L)$ | C |
| SedRR_2323 | $(\bar{\mu}_L\tau_R)(\bar{s}_L b_R)$ | C |
| SedRR_3232 | $(\bar{\tau}_L\mu_R)(\bar{b}_L s_R)$ | C |
| TedRR_2323 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_3232 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}s_R)$ | C |

**sbtaumu**

| WC name | Operator | Type |
|---------|----------|------|
| VedLL_2332 | $(\bar{\mu}_L\gamma^{\mu}\tau_L)(\bar{b}_L\gamma_{\mu}s_L)$ | C |
| VedRR_2332 | $(\bar{\mu}_R\gamma^{\mu}\tau_R)(\bar{b}_R\gamma_{\mu}s_R)$ | C |
| VedLR_2332 | $(\bar{\mu}_L\gamma^{\mu}\tau_L)(\bar{b}_R\gamma_{\mu}s_R)$ | C |
| VdeLR_2332 | $(\bar{s}_L\gamma^{\mu}b_L)(\bar{\tau}_R\gamma_{\mu}\mu_R)$ | C |
| SedRL_2332 | $(\bar{\mu}_L\tau_R)(\bar{b}_R s_L)$ | C |
| SedRL_3223 | $(\bar{\tau}_L\mu_R)(\bar{s}_R b_L)$ | C |
| SedRR_2332 | $(\bar{\mu}_L\tau_R)(\bar{b}_L s_R)$ | C |
| SedRR_3223 | $(\bar{\tau}_L\mu_R)(\bar{s}_L b_R)$ | C |
| TedRR_2332 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}s_R)$ | C |
| TedRR_3223 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}b_R)$ | C |

**dbemu**

| WC name | Operator | Type |
|---------|----------|------|
| VedLL_1213 | $(\bar{e}_L\gamma^{\mu}\mu_L)(\bar{d}_L\gamma_{\mu}b_L)$ | C |
| VedRR_1213 | $(\bar{e}_R\gamma^{\mu}\mu_R)(\bar{d}_R\gamma_{\mu}b_R)$ | C |
| VedLR_1213 | $(\bar{e}_L\gamma^{\mu}\mu_L)(\bar{d}_R\gamma_{\mu}b_R)$ | C |
| VdeLR_1312 | $(\bar{d}_L\gamma^{\mu}b_L)(\bar{e}_R\gamma_{\mu}\mu_R)$ | C |
| SedRL_1213 | $(\bar{e}_L\mu_R)(\bar{d}_R b_L)$ | C |
| SedRL_2131 | $(\bar{\mu}_L e_R)(\bar{b}_R d_L)$ | C |
| SedRR_1213 | $(\bar{e}_L\mu_R)(\bar{d}_L b_R)$ | C |
| SedRR_2131 | $(\bar{\mu}_L e_R)(\bar{b}_L d_R)$ | C |
| TedRR_1213 | $(\bar{e}_L\sigma^{\mu\nu}\mu_R)(\bar{d}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_2131 | $(\bar{\mu}_L\sigma^{\mu\nu}e_R)(\bar{b}_L\sigma_{\mu\nu}d_R)$ | C |

**dbmue**

| WC name | Operator | Type |
|---------|----------|------|
| VedLL_1231 | $(\bar{e}_L\gamma^{\mu}\mu_L)(\bar{b}_L\gamma_{\mu}d_L)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| VedRR_1231 | $(\bar{e}_R\gamma^\mu\mu_R)(\bar{b}_R\gamma_\mu d_R)$ | C |
| VedLR_1231 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{b}_R\gamma_\mu d_R)$ | C |
| VdeLR_1321 | $(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}_R\gamma_\mu e_R)$ | C |
| SedRL_1231 | $(\bar{e}_L\mu_R)(\bar{b}_R d_L)$ | C |
| SedRL_2113 | $(\bar{\mu}_L e_R)(\bar{d}_R b_L)$ | C |
| SedRR_1231 | $(\bar{e}_L\mu_R)(\bar{b}_L d_R)$ | C |
| SedRR_2113 | $(\bar{\mu}_L e_R)(\bar{d}_L b_R)$ | C |
| TedRR_1231 | $(\bar{e}_L\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_2113 | $(\bar{\mu}_L\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}b_R)$ | C |

**dbetau**

| WC name | Operator | Type |
|---------|----------|------|
| VedLL_1313 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{d}_L\gamma_\mu b_L)$ | C |
| VedRR_1313 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{d}_R\gamma_\mu b_R)$ | C |
| VedLR_1313 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| VdeLR_1313 | $(\bar{d}_L\gamma^\mu b_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| SedRL_1313 | $(\bar{e}_L\tau_R)(\bar{d}_R b_L)$ | C |
| SedRL_3131 | $(\bar{\tau}_L e_R)(\bar{b}_R d_L)$ | C |
| SedRR_1313 | $(\bar{e}_L\tau_R)(\bar{d}_L b_R)$ | C |
| SedRR_3131 | $(\bar{\tau}_L e_R)(\bar{b}_L d_R)$ | C |
| TedRR_1313 | $(\bar{e}_L\sigma^{\mu\nu}\tau_R)(\bar{d}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_3131 | $(\bar{\tau}_L\sigma^{\mu\nu}e_R)(\bar{b}_L\sigma_{\mu\nu}d_R)$ | C |

**dbtaue**

| WC name | Operator | Type |
|---------|----------|------|
| VedLL_1331 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{b}_L\gamma_\mu d_L)$ | C |
| VedRR_1331 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{b}_R\gamma_\mu d_R)$ | C |
| VedLR_1331 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{b}_R\gamma_\mu d_R)$ | C |
| VdeLR_1331 | $(\bar{d}_L\gamma^\mu b_L)(\bar{\tau}_R\gamma_\mu e_R)$ | C |
| SedRL_1331 | $(\bar{e}_L\tau_R)(\bar{b}_R d_L)$ | C |
| SedRL_3113 | $(\bar{\tau}_L e_R)(\bar{d}_R b_L)$ | C |
| SedRR_1331 | $(\bar{e}_L\tau_R)(\bar{b}_L d_R)$ | C |
| SedRR_3113 | $(\bar{\tau}_L e_R)(\bar{d}_L b_R)$ | C |
| TedRR_1331 | $(\bar{e}_L\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_3113 | $(\bar{\tau}_L\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}b_R)$ | C |

**dbmutau**

| WC name | Operator | Type |
|---|---|---|
| VedLL_2313 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{d}_L\gamma_\mu b_L)$ | C |
| VedRR_2313 | $(\bar{\mu}_R\gamma^\mu\tau_R)(\bar{d}_R\gamma_\mu b_R)$ | C |
| VedLR_2313 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{d}_R\gamma_\mu b_R)$ | C |
| VdeLR_1323 | $(\bar{d}_L\gamma^\mu b_L)(\bar{\mu}_R\gamma_\mu\tau_R)$ | C |
| SedRL_2313 | $(\bar{\mu}_L\tau_R)(\bar{d}_R b_L)$ | C |
| SedRL_3231 | $(\bar{\tau}_L\mu_R)(\bar{b}_R d_L)$ | C |
| SedRR_2313 | $(\bar{\mu}_L\tau_R)(\bar{d}_L b_R)$ | C |
| SedRR_3231 | $(\bar{\tau}_L\mu_R)(\bar{b}_L d_R)$ | C |
| TedRR_2313 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{d}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_3231 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}d_R)$ | C |

**dbtaumu**

| WC name | Operator | Type |
|---|---|---|
| VedLL_2331 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{b}_L\gamma_\mu d_L)$ | C |
| VedRR_2331 | $(\bar{\mu}_R\gamma^\mu\tau_R)(\bar{b}_R\gamma_\mu d_R)$ | C |
| VedLR_2331 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{b}_R\gamma_\mu d_R)$ | C |
| VdeLR_1332 | $(\bar{d}_L\gamma^\mu b_L)(\bar{\tau}_R\gamma_\mu\mu_R)$ | C |
| SedRL_2331 | $(\bar{\mu}_L\tau_R)(\bar{b}_R d_L)$ | C |
| SedRL_3213 | $(\bar{\tau}_L\mu_R)(\bar{d}_R b_L)$ | C |
| SedRR_2331 | $(\bar{\mu}_L\tau_R)(\bar{b}_L d_R)$ | C |
| SedRR_3213 | $(\bar{\tau}_L\mu_R)(\bar{d}_L b_R)$ | C |
| TedRR_2331 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_3213 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{d}_L\sigma_{\mu\nu}b_R)$ | C |

**sdemu**

| WC name | Operator | Type |
|---|---|---|
| VedLL_1221 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{s}_L\gamma_\mu d_L)$ | C |
| VedRR_1221 | $(\bar{e}_R\gamma^\mu\mu_R)(\bar{s}_R\gamma_\mu d_R)$ | C |
| VedLR_1221 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{s}_R\gamma_\mu d_R)$ | C |
| VdeLR_1221 | $(\bar{d}_L\gamma^\mu s_L)(\bar{\mu}_R\gamma_\mu e_R)$ | C |
| SedRL_1221 | $(\bar{e}_L\mu_R)(\bar{s}_R d_L)$ | C |
| SedRL_2112 | $(\bar{\mu}_L e_R)(\bar{d}_R s_L)$ | C |
| SedRR_1221 | $(\bar{e}_L\mu_R)(\bar{s}_L d_R)$ | C |
| SedRR_2112 | $(\bar{\mu}_L e_R)(\bar{d}_L s_R)$ | C |
| TedRR_1221 | $(\bar{e}_L\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}d_R)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| TedRR_2112 | $(\bar{\mu}_L\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}s_R)$ | C |

**sdmue**

| WC name | Operator | Type |
| --- | --- | --- |
| VedLL_1212 | $(\bar{e}_L\gamma^{\mu}\mu_L)(\bar{d}_L\gamma_{\mu}s_L)$ | C |
| VedRR_1212 | $(\bar{e}_R\gamma^{\mu}\mu_R)(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VedLR_1212 | $(\bar{e}_L\gamma^{\mu}\mu_L)(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VdeLR_1212 | $(\bar{d}_L\gamma^{\mu}s_L)(\bar{e}_R\gamma_{\mu}\mu_R)$ | C |
| SedRL_1212 | $(\bar{e}_L\mu_R)(\bar{d}_R s_L)$ | C |
| SedRL_2121 | $(\bar{\mu}_L e_R)(\bar{s}_R d_L)$ | C |
| SedRR_1212 | $(\bar{e}_L\mu_R)(\bar{d}_L s_R)$ | C |
| SedRR_2121 | $(\bar{\mu}_L e_R)(\bar{s}_L d_R)$ | C |
| TedRR_1212 | $(\bar{e}_L\sigma^{\mu\nu}\mu_R)(\bar{d}_L\sigma_{\mu\nu}s_R)$ | C |
| TedRR_2121 | $(\bar{\mu}_L\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}d_R)$ | C |

**sdetau**

| WC name | Operator | Type |
| --- | --- | --- |
| VedLL_1321 | $(\bar{e}_L\gamma^{\mu}\tau_L)(\bar{s}_L\gamma_{\mu}d_L)$ | C |
| VedRR_1321 | $(\bar{e}_R\gamma^{\mu}\tau_R)(\bar{s}_R\gamma_{\mu}d_R)$ | C |
| VedLR_1321 | $(\bar{e}_L\gamma^{\mu}\tau_L)(\bar{s}_R\gamma_{\mu}d_R)$ | C |
| VdeLR_1231 | $(\bar{d}_L\gamma^{\mu}s_L)(\bar{\tau}_R\gamma_{\mu}e_R)$ | C |
| SedRL_1321 | $(\bar{e}_L\tau_R)(\bar{s}_R d_L)$ | C |
| SedRL_3112 | $(\bar{\tau}_L e_R)(\bar{d}_R s_L)$ | C |
| SedRR_1321 | $(\bar{e}_L\tau_R)(\bar{s}_L d_R)$ | C |
| SedRR_3112 | $(\bar{\tau}_L e_R)(\bar{d}_L s_R)$ | C |
| TedRR_1321 | $(\bar{e}_L\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_3112 | $(\bar{\tau}_L\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}s_R)$ | C |

**sdtaue**

| WC name | Operator | Type |
| --- | --- | --- |
| VedLL_1312 | $(\bar{e}_L\gamma^{\mu}\tau_L)(\bar{d}_L\gamma_{\mu}s_L)$ | C |
| VedRR_1312 | $(\bar{e}_R\gamma^{\mu}\tau_R)(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VedLR_1312 | $(\bar{e}_L\gamma^{\mu}\tau_L)(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VdeLR_1213 | $(\bar{d}_L\gamma^{\mu}s_L)(\bar{e}_R\gamma_{\mu}\tau_R)$ | C |
| SedRL_1312 | $(\bar{e}_L\tau_R)(\bar{d}_R s_L)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| SedRL_3121 | $(\bar{\tau}_L e_R)(\bar{s}_R d_L)$ | C |
| SedRR_1312 | $(\bar{e}_L \tau_R)(\bar{d}_L s_R)$ | C |
| SedRR_3121 | $(\bar{\tau}_L e_R)(\bar{s}_L d_R)$ | C |
| TedRR_1312 | $(\bar{e}_L \sigma^{\mu\nu} \tau_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_3121 | $(\bar{\tau}_L \sigma^{\mu\nu} e_R)(\bar{s}_L \sigma_{\mu\nu} d_R)$ | C |

**sdmutau**

| WC name | Operator | Type |
|---------|----------|------|
| VedLL_2321 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{s}_L \gamma_\mu d_L)$ | C |
| VedRR_2321 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{s}_R \gamma_\mu d_R)$ | C |
| VedLR_2321 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{s}_R \gamma_\mu d_R)$ | C |
| VdeLR_1232 | $(\bar{d}_L \gamma^\mu s_L)(\bar{\tau}_R \gamma_\mu \mu_R)$ | C |
| SedRL_2321 | $(\bar{\mu}_L \tau_R)(\bar{s}_R d_L)$ | C |
| SedRL_3212 | $(\bar{\tau}_L \mu_R)(\bar{d}_R s_L)$ | C |
| SedRR_2321 | $(\bar{\mu}_L \tau_R)(\bar{s}_L d_R)$ | C |
| SedRR_3212 | $(\bar{\tau}_L \mu_R)(\bar{d}_L s_R)$ | C |
| TedRR_2321 | $(\bar{\mu}_L \sigma^{\mu\nu} \tau_R)(\bar{s}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_3212 | $(\bar{\tau}_L \sigma^{\mu\nu} \mu_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$ | C |

**sdtaumu**

| WC name | Operator | Type |
|---------|----------|------|
| VedLL_2312 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{d}_L \gamma_\mu s_L)$ | C |
| VedRR_2312 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{d}_R \gamma_\mu s_R)$ | C |
| VedLR_2312 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{d}_R \gamma_\mu s_R)$ | C |
| VdeLR_1223 | $(\bar{d}_L \gamma^\mu s_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| SedRL_2312 | $(\bar{\mu}_L \tau_R)(\bar{d}_R s_L)$ | C |
| SedRL_3221 | $(\bar{\tau}_L \mu_R)(\bar{s}_R d_L)$ | C |
| SedRR_2312 | $(\bar{\mu}_L \tau_R)(\bar{d}_L s_R)$ | C |
| SedRR_3221 | $(\bar{\tau}_L \mu_R)(\bar{s}_L d_R)$ | C |
| TedRR_2312 | $(\bar{\mu}_L \sigma^{\mu\nu} \tau_R)(\bar{d}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_3221 | $(\bar{\tau}_L \sigma^{\mu\nu} \mu_R)(\bar{s}_L \sigma_{\mu\nu} d_R)$ | C |

**cuemu**

| WC name | Operator | Type |
|---------|----------|------|
| VeuLL_1221 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{c}_L \gamma_\mu u_L)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| VeuRR_1221 | $(\bar{e}_R\gamma^\mu\mu_R)(\bar{c}_R\gamma_\mu u_R)$ | C |
| VeuLR_1221 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{c}_R\gamma_\mu u_R)$ | C |
| VueLR_1221 | $(\bar{u}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu e_R)$ | C |
| SeuRL_1221 | $(\bar{e}_L\mu_R)(\bar{c}_R u_L)$ | C |
| SeuRL_2112 | $(\bar{\mu}_L e_R)(\bar{u}_R c_L)$ | C |
| SeuRR_1221 | $(\bar{e}_L\mu_R)(\bar{c}_L u_R)$ | C |
| SeuRR_2112 | $(\bar{\mu}_L e_R)(\bar{u}_L c_R)$ | C |
| TeuRR_1221 | $(\bar{e}_L\sigma^{\mu\nu}\mu_R)(\bar{c}_L\sigma_{\mu\nu}u_R)$ | C |
| TeuRR_2112 | $(\bar{\mu}_L\sigma^{\mu\nu}e_R)(\bar{u}_L\sigma_{\mu\nu}c_R)$ | C |

**cumue**

| WC name | Operator | Type |
| --- | --- | --- |
| VeuLL_1212 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{u}_L\gamma_\mu c_L)$ | C |
| VeuRR_1212 | $(\bar{e}_R\gamma^\mu\mu_R)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VeuLR_1212 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VueLR_1212 | $(\bar{u}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu\mu_R)$ | C |
| SeuRL_1212 | $(\bar{e}_L\mu_R)(\bar{u}_R c_L)$ | C |
| SeuRL_2121 | $(\bar{\mu}_L e_R)(\bar{c}_R u_L)$ | C |
| SeuRR_1212 | $(\bar{e}_L\mu_R)(\bar{u}_L c_R)$ | C |
| SeuRR_2121 | $(\bar{\mu}_L e_R)(\bar{c}_L u_R)$ | C |
| TeuRR_1212 | $(\bar{e}_L\sigma^{\mu\nu}\mu_R)(\bar{u}_L\sigma_{\mu\nu}c_R)$ | C |
| TeuRR_2121 | $(\bar{\mu}_L\sigma^{\mu\nu}e_R)(\bar{c}_L\sigma_{\mu\nu}u_R)$ | C |

**cuetau**

| WC name | Operator | Type |
| --- | --- | --- |
| VeuLL_1321 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{c}_L\gamma_\mu u_L)$ | C |
| VeuRR_1321 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{c}_R\gamma_\mu u_R)$ | C |
| VeuLR_1321 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{c}_R\gamma_\mu u_R)$ | C |
| VueLR_1231 | $(\bar{u}_L\gamma^\mu c_L)(\bar{\tau}_R\gamma_\mu e_R)$ | C |
| SeuRL_1321 | $(\bar{e}_L\tau_R)(\bar{c}_R u_L)$ | C |
| SeuRL_3112 | $(\bar{\tau}_L e_R)(\bar{u}_R c_L)$ | C |
| SeuRR_1321 | $(\bar{e}_L\tau_R)(\bar{c}_L u_R)$ | C |
| SeuRR_3112 | $(\bar{\tau}_L e_R)(\bar{u}_L c_R)$ | C |
| TeuRR_1321 | $(\bar{e}_L\sigma^{\mu\nu}\tau_R)(\bar{c}_L\sigma_{\mu\nu}u_R)$ | C |
| TeuRR_3112 | $(\bar{\tau}_L\sigma^{\mu\nu}e_R)(\bar{u}_L\sigma_{\mu\nu}c_R)$ | C |

**cutaue**

| WC name | Operator | Type |
|---|---|---|
| VeuLL_1312 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{u}_L\gamma_\mu c_L)$ | C |
| VeuRR_1312 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VeuLR_1312 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VueLR_1213 | $(\bar{u}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| SeuRL_1312 | $(\bar{e}_L\tau_R)(\bar{u}_R c_L)$ | C |
| SeuRL_3121 | $(\bar{\tau}_L e_R)(\bar{c}_R u_L)$ | C |
| SeuRR_1312 | $(\bar{e}_L\tau_R)(\bar{u}_L c_R)$ | C |
| SeuRR_3121 | $(\bar{\tau}_L e_R)(\bar{c}_L u_R)$ | C |
| TeuRR_1312 | $(\bar{e}_L\sigma^{\mu\nu}\tau_R)(\bar{u}_L\sigma_{\mu\nu} c_R)$ | C |
| TeuRR_3121 | $(\bar{\tau}_L\sigma^{\mu\nu}e_R)(\bar{c}_L\sigma_{\mu\nu} u_R)$ | C |

**cumutau**

| WC name | Operator | Type |
|---|---|---|
| VeuLL_2321 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{c}_L\gamma_\mu u_L)$ | C |
| VeuRR_2321 | $(\bar{\mu}_R\gamma^\mu\tau_R)(\bar{c}_R\gamma_\mu u_R)$ | C |
| VeuLR_2321 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{c}_R\gamma_\mu u_R)$ | C |
| VueLR_1232 | $(\bar{u}_L\gamma^\mu c_L)(\bar{\tau}_R\gamma_\mu\mu_R)$ | C |
| SeuRL_2321 | $(\bar{\mu}_L\tau_R)(\bar{c}_R u_L)$ | C |
| SeuRL_3212 | $(\bar{\tau}_L\mu_R)(\bar{u}_R c_L)$ | C |
| SeuRR_2321 | $(\bar{\mu}_L\tau_R)(\bar{c}_L u_R)$ | C |
| SeuRR_3212 | $(\bar{\tau}_L\mu_R)(\bar{u}_L c_R)$ | C |
| TeuRR_2321 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{c}_L\sigma_{\mu\nu} u_R)$ | C |
| TeuRR_3212 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{u}_L\sigma_{\mu\nu} c_R)$ | C |

**cutaumu**

| WC name | Operator | Type |
|---|---|---|
| VeuLL_2312 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{u}_L\gamma_\mu c_L)$ | C |
| VeuRR_2312 | $(\bar{\mu}_R\gamma^\mu\tau_R)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VeuLR_2312 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{u}_R\gamma_\mu c_R)$ | C |
| VueLR_1223 | $(\bar{u}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu\tau_R)$ | C |
| SeuRL_2312 | $(\bar{\mu}_L\tau_R)(\bar{u}_R c_L)$ | C |
| SeuRL_3221 | $(\bar{\tau}_L\mu_R)(\bar{c}_R u_L)$ | C |
| SeuRR_2312 | $(\bar{\mu}_L\tau_R)(\bar{u}_L c_R)$ | C |
| SeuRR_3221 | $(\bar{\tau}_L\mu_R)(\bar{c}_L u_R)$ | C |
| TeuRR_2312 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{u}_L\sigma_{\mu\nu} c_R)$ | C |
| TeuRR_3221 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{c}_L\sigma_{\mu\nu} u_R)$ | C |

**mutau**

| WC name | Operator | Type |
|---|---|---|
| egamma_23 | $\bar{\mu}_L \sigma^{\mu\nu} \tau_R \, F_{\mu\nu}$ | C |
| egamma_32 | $\bar{\tau}_L \sigma^{\mu\nu} \mu_R \, F_{\mu\nu}$ | C |
| VeeLL_1123 | $(\bar{e}_L \gamma^\mu e_L)(\bar{\mu}_L \gamma_\mu \tau_L)$ | C |
| VeeLL_2223 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{\mu}_L \gamma_\mu \tau_L)$ | C |
| VeeLL_2333 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{\tau}_L \gamma_\mu \tau_L)$ | C |
| VnueLL_1123 | $(\bar{\nu}_{L1} \gamma^\mu \nu_{L1})(\bar{\mu}_L \gamma_\mu \tau_L)$ | C |
| VnueLL_2223 | $(\bar{\nu}_{L2} \gamma^\mu \nu_{L2})(\bar{\mu}_L \gamma_\mu \tau_L)$ | C |
| VnueLL_3323 | $(\bar{\nu}_{L3} \gamma^\mu \nu_{L3})(\bar{\mu}_L \gamma_\mu \tau_L)$ | C |
| VeuLL_2311 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{u}_L \gamma_\mu u_L)$ | C |
| VeuLL_2322 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{c}_L \gamma_\mu c_L)$ | C |
| VedLL_2311 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{d}_L \gamma_\mu d_L)$ | C |
| VedLL_2322 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{s}_L \gamma_\mu s_L)$ | C |
| VedLL_2333 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{b}_L \gamma_\mu b_L)$ | C |
| VeeRR_1123 | $(\bar{e}_R \gamma^\mu e_R)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VeeRR_2223 | $(\bar{\mu}_R \gamma^\mu \mu_R)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VeeRR_2333 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{\tau}_R \gamma_\mu \tau_R)$ | C |
| VeuRR_2311 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{u}_R \gamma_\mu u_R)$ | C |
| VeuRR_2322 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{c}_R \gamma_\mu c_R)$ | C |
| VedRR_2311 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{d}_R \gamma_\mu d_R)$ | C |
| VedRR_2322 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{s}_R \gamma_\mu s_R)$ | C |
| VedRR_2333 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{b}_R \gamma_\mu b_R)$ | C |
| VnueLR_1123 | $(\bar{\nu}_{L1} \gamma^\mu \nu_{L1})(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VnueLR_2223 | $(\bar{\nu}_{L2} \gamma^\mu \nu_{L2})(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VnueLR_3323 | $(\bar{\nu}_{L3} \gamma^\mu \nu_{L3})(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VeeLR_1123 | $(\bar{e}_L \gamma^\mu e_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VeeLR_1231 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_R \gamma_\mu e_R)$ | C |
| VeeLR_1321 | $(\bar{e}_L \gamma^\mu \tau_L)(\bar{\mu}_R \gamma_\mu e_R)$ | C |
| VeeLR_2223 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VeeLR_2311 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{e}_R \gamma_\mu e_R)$ | C |
| VeeLR_2322 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{\mu}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_2333 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{\tau}_R \gamma_\mu \tau_R)$ | C |
| VeeLR_3323 | $(\bar{\tau}_L \gamma^\mu \tau_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VeuLR_2311 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{u}_R \gamma_\mu u_R)$ | C |
| VeuLR_2322 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{c}_R \gamma_\mu c_R)$ | C |
| VedLR_2311 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{d}_R \gamma_\mu d_R)$ | C |
| VedLR_2322 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{s}_R \gamma_\mu s_R)$ | C |
| VedLR_2333 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{b}_R \gamma_\mu b_R)$ | C |
| VueLR_1123 | $(\bar{u}_L \gamma^\mu u_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VueLR_2223 | $(\bar{c}_L \gamma^\mu c_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VdeLR_1123 | $(\bar{d}_L \gamma^\mu d_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VdeLR_2223 | $(\bar{s}_L \gamma^\mu s_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VdeLR_3323 | $(\bar{b}_L \gamma^\mu b_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| SeuRL_2311 | $(\bar{\mu}_L\tau_R)(\bar{u}_R u_L)$ | C |
| SeuRL_2322 | $(\bar{\mu}_L\tau_R)(\bar{c}_R c_L)$ | C |
| SeuRL_3211 | $(\bar{\tau}_L\mu_R)(\bar{u}_R u_L)$ | C |
| SeuRL_3222 | $(\bar{\tau}_L\mu_R)(\bar{c}_R c_L)$ | C |
| SedRL_2311 | $(\bar{\mu}_L\tau_R)(\bar{d}_R d_L)$ | C |
| SedRL_2322 | $(\bar{\mu}_L\tau_R)(\bar{s}_R s_L)$ | C |
| SedRL_2333 | $(\bar{\mu}_L\tau_R)(\bar{b}_R b_L)$ | C |
| SedRL_3211 | $(\bar{\tau}_L\mu_R)(\bar{d}_R d_L)$ | C |
| SedRL_3222 | $(\bar{\tau}_L\mu_R)(\bar{s}_R s_L)$ | C |
| SedRL_3233 | $(\bar{\tau}_L\mu_R)(\bar{b}_R b_L)$ | C |
| SeeRR_1123 | $(\bar{e}_L e_R)(\bar{\mu}_L\tau_R)$ | C |
| SeeRR_1132 | $(\bar{e}_L e_R)(\bar{\tau}_L\mu_R)$ | C |
| SeeRR_1231 | $(\bar{e}_L\mu_R)(\bar{\tau}_L e_R)$ | C |
| SeeRR_1321 | $(\bar{e}_L\tau_R)(\bar{\mu}_L e_R)$ | C |
| SeeRR_2223 | $(\bar{\mu}_L\mu_R)(\bar{\mu}_L\tau_R)$ | C |
| SeeRR_2232 | $(\bar{\mu}_L\mu_R)(\bar{\tau}_L\mu_R)$ | C |
| SeeRR_2333 | $(\bar{\mu}_L\tau_R)(\bar{\tau}_L\tau_R)$ | C |
| SeeRR_3233 | $(\bar{\tau}_L\mu_R)(\bar{\tau}_L\tau_R)$ | C |
| SeuRR_2311 | $(\bar{\mu}_L\tau_R)(\bar{u}_L u_R)$ | C |
| SeuRR_2322 | $(\bar{\mu}_L\tau_R)(\bar{c}_L c_R)$ | C |
| SeuRR_3211 | $(\bar{\tau}_L\mu_R)(\bar{u}_L u_R)$ | C |
| SeuRR_3222 | $(\bar{\tau}_L\mu_R)(\bar{c}_L c_R)$ | C |
| TeuRR_2311 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{u}_L\sigma_{\mu\nu}u_R)$ | C |
| TeuRR_2322 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{c}_L\sigma_{\mu\nu}c_R)$ | C |
| TeuRR_3211 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{u}_L\sigma_{\mu\nu}u_R)$ | C |
| TeuRR_3222 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{c}_L\sigma_{\mu\nu}c_R)$ | C |
| SedRR_2311 | $(\bar{\mu}_L\tau_R)(\bar{d}_L d_R)$ | C |
| SedRR_2322 | $(\bar{\mu}_L\tau_R)(\bar{s}_L s_R)$ | C |
| SedRR_2333 | $(\bar{\mu}_L\tau_R)(\bar{b}_L b_R)$ | C |
| SedRR_3211 | $(\bar{\tau}_L\mu_R)(\bar{d}_L d_R)$ | C |
| SedRR_3222 | $(\bar{\tau}_L\mu_R)(\bar{s}_L s_R)$ | C |
| SedRR_3233 | $(\bar{\tau}_L\mu_R)(\bar{b}_L b_R)$ | C |
| TedRR_2311 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{d}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_2322 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}s_R)$ | C |
| TedRR_2333 | $(\bar{\mu}_L\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_3211 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{d}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_3222 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}s_R)$ | C |
| TedRR_3233 | $(\bar{\tau}_L\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}b_R)$ | C |

mue

| WC name | Operator | Type |
|---|---|---|
| egamma_12 | $\bar{e}_L \sigma^{\mu\nu} \mu_R \, F_{\mu\nu}$ | C |
| egamma_21 | $\bar{\mu}_L \sigma^{\mu\nu} e_R \, F_{\mu\nu}$ | C |
| VeeLL_1112 | $(\bar{e}_L \gamma^\mu e_L)(\bar{e}_L \gamma_\mu \mu_L)$ | C |
| VeeLL_1222 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{\mu}_L \gamma_\mu \mu_L)$ | C |
| VeeLL_1233 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_L \gamma_\mu \tau_L)$ | C |
| VnueLL_1112 | $(\bar{\nu}_{L1} \gamma^\mu \nu_{L1})(\bar{e}_L \gamma_\mu \mu_L)$ | C |
| VnueLL_2212 | $(\bar{\nu}_{L2} \gamma^\mu \nu_{L2})(\bar{e}_L \gamma_\mu \mu_L)$ | C |
| VnueLL_3312 | $(\bar{\nu}_{L3} \gamma^\mu \nu_{L3})(\bar{e}_L \gamma_\mu \mu_L)$ | C |
| VeuLL_1211 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{u}_L \gamma_\mu u_L)$ | C |
| VeuLL_1222 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{c}_L \gamma_\mu c_L)$ | C |
| VedLL_1211 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{d}_L \gamma_\mu d_L)$ | C |
| VedLL_1222 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{s}_L \gamma_\mu s_L)$ | C |
| VedLL_1233 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{b}_L \gamma_\mu b_L)$ | C |
| VeeRR_1112 | $(\bar{e}_R \gamma^\mu e_R)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VeeRR_1222 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{\mu}_R \gamma_\mu \mu_R)$ | C |
| VeeRR_1233 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{\tau}_R \gamma_\mu \tau_R)$ | C |
| VeuRR_1211 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{u}_R \gamma_\mu u_R)$ | C |
| VeuRR_1222 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{c}_R \gamma_\mu c_R)$ | C |
| VedRR_1211 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{d}_R \gamma_\mu d_R)$ | C |
| VedRR_1222 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{s}_R \gamma_\mu s_R)$ | C |
| VedRR_1233 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{b}_R \gamma_\mu b_R)$ | C |
| VnueLR_1112 | $(\bar{\nu}_{L1} \gamma^\mu \nu_{L1})(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VnueLR_2212 | $(\bar{\nu}_{L2} \gamma^\mu \nu_{L2})(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VnueLR_3312 | $(\bar{\nu}_{L3} \gamma^\mu \nu_{L3})(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_1112 | $(\bar{e}_L \gamma^\mu e_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_1211 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{e}_R \gamma_\mu e_R)$ | C |
| VeeLR_1222 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{\mu}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_1233 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_R \gamma_\mu \tau_R)$ | C |
| VeeLR_1332 | $(\bar{e}_L \gamma^\mu \tau_L)(\bar{\tau}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_2212 | $(\bar{\mu}_L \gamma^\mu \mu_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_2331 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{\tau}_R \gamma_\mu e_R)$ | C |
| VeeLR_3312 | $(\bar{\tau}_L \gamma^\mu \tau_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VeuLR_1211 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{u}_R \gamma_\mu u_R)$ | C |
| VeuLR_1222 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{c}_R \gamma_\mu c_R)$ | C |
| VedLR_1211 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{d}_R \gamma_\mu d_R)$ | C |
| VedLR_1222 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{s}_R \gamma_\mu s_R)$ | C |
| VedLR_1233 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{b}_R \gamma_\mu b_R)$ | C |
| VueLR_1112 | $(\bar{u}_L \gamma^\mu u_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VueLR_2212 | $(\bar{c}_L \gamma^\mu c_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VdeLR_1112 | $(\bar{d}_L \gamma^\mu d_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VdeLR_2212 | $(\bar{s}_L \gamma^\mu s_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VdeLR_3312 | $(\bar{b}_L \gamma^\mu b_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| SeuRL_1211 | $(\bar{e}_L \mu_R)(\bar{u}_R u_L)$ | C |
| SeuRL_1222 | $(\bar{e}_L \mu_R)(\bar{c}_R c_L)$ | C |

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| WC name | Operator | Type |
|---------|----------|------|
| SeuRL_2111 | $(\bar{\mu}_L e_R)(\bar{u}_R u_L)$ | C |
| SeuRL_2122 | $(\bar{\mu}_L e_R)(\bar{c}_R c_L)$ | C |
| SedRL_1211 | $(\bar{e}_L \mu_R)(\bar{d}_R d_L)$ | C |
| SedRL_1222 | $(\bar{e}_L \mu_R)(\bar{s}_R s_L)$ | C |
| SedRL_1233 | $(\bar{e}_L \mu_R)(\bar{b}_R b_L)$ | C |
| SedRL_2111 | $(\bar{\mu}_L e_R)(\bar{d}_R d_L)$ | C |
| SedRL_2122 | $(\bar{\mu}_L e_R)(\bar{s}_R s_L)$ | C |
| SedRL_2133 | $(\bar{\mu}_L e_R)(\bar{b}_R b_L)$ | C |
| SeeRR_1112 | $(\bar{e}_L e_R)(\bar{e}_L \mu_R)$ | C |
| SeeRR_1121 | $(\bar{e}_L e_R)(\bar{\mu}_L e_R)$ | C |
| SeeRR_1222 | $(\bar{e}_L \mu_R)(\bar{\mu}_L \mu_R)$ | C |
| SeeRR_1233 | $(\bar{e}_L \mu_R)(\bar{\tau}_L \tau_R)$ | C |
| SeeRR_1332 | $(\bar{e}_L \tau_R)(\bar{\tau}_L \mu_R)$ | C |
| SeeRR_2122 | $(\bar{\mu}_L e_R)(\bar{\mu}_L \mu_R)$ | C |
| SeeRR_2133 | $(\bar{\mu}_L e_R)(\bar{\tau}_L \tau_R)$ | C |
| SeeRR_2331 | $(\bar{\mu}_L \tau_R)(\bar{\tau}_L e_R)$ | C |
| SeuRR_1211 | $(\bar{e}_L \mu_R)(\bar{u}_L u_R)$ | C |
| SeuRR_1222 | $(\bar{e}_L \mu_R)(\bar{c}_L c_R)$ | C |
| SeuRR_2111 | $(\bar{\mu}_L e_R)(\bar{u}_L u_R)$ | C |
| SeuRR_2122 | $(\bar{\mu}_L e_R)(\bar{c}_L c_R)$ | C |
| TeuRR_1211 | $(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{u}_L \sigma_{\mu\nu} u_R)$ | C |
| TeuRR_1222 | $(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{c}_L \sigma_{\mu\nu} c_R)$ | C |
| TeuRR_2111 | $(\bar{\mu}_L \sigma^{\mu\nu} e_R)(\bar{u}_L \sigma_{\mu\nu} u_R)$ | C |
| TeuRR_2122 | $(\bar{\mu}_L \sigma^{\mu\nu} e_R)(\bar{c}_L \sigma_{\mu\nu} c_R)$ | C |
| SedRR_1211 | $(\bar{e}_L \mu_R)(\bar{d}_L d_R)$ | C |
| SedRR_1222 | $(\bar{e}_L \mu_R)(\bar{s}_L s_R)$ | C |
| SedRR_1233 | $(\bar{e}_L \mu_R)(\bar{b}_L b_R)$ | C |
| SedRR_2111 | $(\bar{\mu}_L e_R)(\bar{d}_L d_R)$ | C |
| SedRR_2122 | $(\bar{\mu}_L e_R)(\bar{s}_L s_R)$ | C |
| SedRR_2133 | $(\bar{\mu}_L e_R)(\bar{b}_L b_R)$ | C |
| TedRR_1211 | $(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{d}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_1222 | $(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{s}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_1233 | $(\bar{e}_L \sigma^{\mu\nu} \mu_R)(\bar{b}_L \sigma_{\mu\nu} b_R)$ | C |
| TedRR_2111 | $(\bar{\mu}_L \sigma^{\mu\nu} e_R)(\bar{d}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_2122 | $(\bar{\mu}_L \sigma^{\mu\nu} e_R)(\bar{s}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_2133 | $(\bar{\mu}_L \sigma^{\mu\nu} e_R)(\bar{b}_L \sigma_{\mu\nu} b_R)$ | C |

**taue**

| WC name | Operator | Type |
|---------|----------|------|
| egamma_13 | $\bar{e}_L \sigma^{\mu\nu} \tau_R \, F_{\mu\nu}$ | C |
| egamma_31 | $\bar{\tau}_L \sigma^{\mu\nu} e_R \, F_{\mu\nu}$ | C |

| WC name | Operator | Type |
|---|---|---|
| VeeLL_1113 | $(\bar{e}_L\gamma^\mu e_L)(\bar{e}_L\gamma_\mu\tau_L)$ | C |
| VeeLL_1223 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{\mu}_L\gamma_\mu\tau_L)$ | C |
| VeeLL_1333 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{\tau}_L\gamma_\mu\tau_L)$ | C |
| VnueLL_1113 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{e}_L\gamma_\mu\tau_L)$ | C |
| VnueLL_2213 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{e}_L\gamma_\mu\tau_L)$ | C |
| VnueLL_3313 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{e}_L\gamma_\mu\tau_L)$ | C |
| VeuLL_1311 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{u}_L\gamma_\mu u_L)$ | C |
| VeuLL_1322 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{c}_L\gamma_\mu c_L)$ | C |
| VedLL_1311 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{d}_L\gamma_\mu d_L)$ | C |
| VedLL_1322 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{s}_L\gamma_\mu s_L)$ | C |
| VedLL_1333 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{b}_L\gamma_\mu b_L)$ | C |
| VeeRR_1113 | $(\bar{e}_R\gamma^\mu e_R)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VeeRR_1223 | $(\bar{e}_R\gamma^\mu\mu_R)(\bar{\mu}_R\gamma_\mu\tau_R)$ | C |
| VeeRR_1333 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{\tau}_R\gamma_\mu\tau_R)$ | C |
| VeuRR_1311 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{u}_R\gamma_\mu u_R)$ | C |
| VeuRR_1322 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{c}_R\gamma_\mu c_R)$ | C |
| VedRR_1311 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{d}_R\gamma_\mu d_R)$ | C |
| VedRR_1322 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{s}_R\gamma_\mu s_R)$ | C |
| VedRR_1333 | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{b}_R\gamma_\mu b_R)$ | C |
| VnueLR_1113 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VnueLR_2213 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VnueLR_3313 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VeeLR_1113 | $(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VeeLR_1223 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu\tau_R)$ | C |
| VeeLR_1311 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{e}_R\gamma_\mu e_R)$ | C |
| VeeLR_1322 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | C |
| VeeLR_1333 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | C |
| VeeLR_2213 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VeeLR_2312 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{e}_R\gamma_\mu\mu_R)$ | C |
| VeeLR_3313 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VeuLR_1311 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{u}_R\gamma_\mu u_R)$ | C |
| VeuLR_1322 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{c}_R\gamma_\mu c_R)$ | C |
| VedLR_1311 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{d}_R\gamma_\mu d_R)$ | C |
| VedLR_1322 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{s}_R\gamma_\mu s_R)$ | C |
| VedLR_1333 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{b}_R\gamma_\mu b_R)$ | C |
| VueLR_1113 | $(\bar{u}_L\gamma^\mu u_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VueLR_2213 | $(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VdeLR_1113 | $(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VdeLR_2213 | $(\bar{s}_L\gamma^\mu s_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| VdeLR_3313 | $(\bar{b}_L\gamma^\mu b_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| SeuRL_1311 | $(\bar{e}_L\tau_R)(\bar{u}_R u_L)$ | C |
| SeuRL_1322 | $(\bar{e}_L\tau_R)(\bar{c}_R c_L)$ | C |
| SeuRL_3111 | $(\bar{\tau}_L e_R)(\bar{u}_R u_L)$ | C |
| SeuRL_3122 | $(\bar{\tau}_L e_R)(\bar{c}_R c_L)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| SedRL_1311 | $(\bar{e}_L \tau_R)(\bar{d}_R d_L)$ | C |
| SedRL_1322 | $(\bar{e}_L \tau_R)(\bar{s}_R s_L)$ | C |
| SedRL_1333 | $(\bar{e}_L \tau_R)(\bar{b}_R b_L)$ | C |
| SedRL_3111 | $(\bar{\tau}_L e_R)(\bar{d}_R d_L)$ | C |
| SedRL_3122 | $(\bar{\tau}_L e_R)(\bar{s}_R s_L)$ | C |
| SedRL_3133 | $(\bar{\tau}_L e_R)(\bar{b}_R b_L)$ | C |
| SeeRR_1113 | $(\bar{e}_L e_R)(\bar{e}_L \tau_R)$ | C |
| SeeRR_1131 | $(\bar{e}_L e_R)(\bar{\tau}_L e_R)$ | C |
| SeeRR_1223 | $(\bar{e}_L \mu_R)(\bar{\mu}_L \tau_R)$ | C |
| SeeRR_1322 | $(\bar{e}_L \tau_R)(\bar{\mu}_L \mu_R)$ | C |
| SeeRR_1333 | $(\bar{e}_L \tau_R)(\bar{\tau}_L \tau_R)$ | C |
| SeeRR_2132 | $(\bar{\mu}_L e_R)(\bar{\tau}_L \mu_R)$ | C |
| SeeRR_2231 | $(\bar{\mu}_L \mu_R)(\bar{\tau}_L e_R)$ | C |
| SeeRR_3133 | $(\bar{\tau}_L e_R)(\bar{\tau}_L \tau_R)$ | C |
| SeuRR_1311 | $(\bar{e}_L \tau_R)(\bar{u}_L u_R)$ | C |
| SeuRR_1322 | $(\bar{e}_L \tau_R)(\bar{c}_L c_R)$ | C |
| SeuRR_3111 | $(\bar{\tau}_L e_R)(\bar{u}_L u_R)$ | C |
| SeuRR_3122 | $(\bar{\tau}_L e_R)(\bar{c}_L c_R)$ | C |
| TeuRR_1311 | $(\bar{e}_L \sigma^{\mu\nu} \tau_R)(\bar{u}_L \sigma_{\mu\nu} u_R)$ | C |
| TeuRR_1322 | $(\bar{e}_L \sigma^{\mu\nu} \tau_R)(\bar{c}_L \sigma_{\mu\nu} c_R)$ | C |
| TeuRR_3111 | $(\bar{\tau}_L \sigma^{\mu\nu} e_R)(\bar{u}_L \sigma_{\mu\nu} u_R)$ | C |
| TeuRR_3122 | $(\bar{\tau}_L \sigma^{\mu\nu} e_R)(\bar{c}_L \sigma_{\mu\nu} c_R)$ | C |
| SedRR_1311 | $(\bar{e}_L \tau_R)(\bar{d}_L d_R)$ | C |
| SedRR_1322 | $(\bar{e}_L \tau_R)(\bar{s}_L s_R)$ | C |
| SedRR_1333 | $(\bar{e}_L \tau_R)(\bar{b}_L b_R)$ | C |
| SedRR_3111 | $(\bar{\tau}_L e_R)(\bar{d}_L d_R)$ | C |
| SedRR_3122 | $(\bar{\tau}_L e_R)(\bar{s}_L s_R)$ | C |
| SedRR_3133 | $(\bar{\tau}_L e_R)(\bar{b}_L b_R)$ | C |
| TedRR_1311 | $(\bar{e}_L \sigma^{\mu\nu} \tau_R)(\bar{d}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_1322 | $(\bar{e}_L \sigma^{\mu\nu} \tau_R)(\bar{s}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_1333 | $(\bar{e}_L \sigma^{\mu\nu} \tau_R)(\bar{b}_L \sigma_{\mu\nu} b_R)$ | C |
| TedRR_3111 | $(\bar{\tau}_L \sigma^{\mu\nu} e_R)(\bar{d}_L \sigma_{\mu\nu} d_R)$ | C |
| TedRR_3122 | $(\bar{\tau}_L \sigma^{\mu\nu} e_R)(\bar{s}_L \sigma_{\mu\nu} s_R)$ | C |
| TedRR_3133 | $(\bar{\tau}_L \sigma^{\mu\nu} e_R)(\bar{b}_L \sigma_{\mu\nu} b_R)$ | C |

**tauetaue**

| WC name | Operator | Type |
| --- | --- | --- |
| VeeLL_1313 | $(\bar{e}_L \gamma^\mu \tau_L)(\bar{e}_L \gamma_\mu \tau_L)$ | C |
| VeeRR_1313 | $(\bar{e}_R \gamma^\mu \tau_R)(\bar{e}_R \gamma_\mu \tau_R)$ | C |
| VeeLR_1313 | $(\bar{e}_L \gamma^\mu \tau_L)(\bar{e}_R \gamma_\mu \tau_R)$ | C |
| SeeRR_1313 | $(\bar{e}_L \tau_R)(\bar{e}_L \tau_R)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| SeeRR_3131 | $(\bar{\tau}_L e_R)(\bar{\tau}_L e_R)$ | C |

**taumutaumu**

| WC name | Operator | Type |
|---------|----------|------|
| VeeLL_2323 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{\mu}_L \gamma_\mu \tau_L)$ | C |
| VeeRR_2323 | $(\bar{\mu}_R \gamma^\mu \tau_R)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| VeeLR_2323 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{\mu}_R \gamma_\mu \tau_R)$ | C |
| SeeRR_2323 | $(\bar{\mu}_L \tau_R)(\bar{\mu}_L \tau_R)$ | C |
| SeeRR_3232 | $(\bar{\tau}_L \mu_R)(\bar{\tau}_L \mu_R)$ | C |

**muemue**

| WC name | Operator | Type |
|---------|----------|------|
| VeeLL_1212 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{e}_L \gamma_\mu \mu_L)$ | C |
| VeeRR_1212 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_1212 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{e}_R \gamma_\mu \mu_R)$ | C |
| SeeRR_1212 | $(\bar{e}_L \mu_R)(\bar{e}_L \mu_R)$ | C |
| SeeRR_2121 | $(\bar{\mu}_L e_R)(\bar{\mu}_L e_R)$ | C |

**muemutau**

| WC name | Operator | Type |
|---------|----------|------|
| VeeLL_1232 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_L \gamma_\mu \mu_L)$ | C |
| VeeRR_1232 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{\tau}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_1232 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{\tau}_R \gamma_\mu \mu_R)$ | C |
| VeeLR_2321 | $(\bar{\mu}_L \gamma^\mu \tau_L)(\bar{\mu}_R \gamma_\mu e_R)$ | C |
| SeeRR_1232 | $(\bar{e}_L \mu_R)(\bar{\tau}_L \mu_R)$ | C |
| SeeRR_2123 | $(\bar{\mu}_L e_R)(\bar{\mu}_L \tau_R)$ | C |

**etauemu**

| WC name | Operator | Type |
|---------|----------|------|
| VeeLL_1213 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{e}_L \gamma_\mu \tau_L)$ | C |
| VeeRR_1213 | $(\bar{e}_R \gamma^\mu \mu_R)(\bar{e}_R \gamma_\mu \tau_R)$ | C |
| VeeLR_1213 | $(\bar{e}_L \gamma^\mu \mu_L)(\bar{e}_R \gamma_\mu \tau_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| `VeeLR_1312` | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{e}_R\gamma_\mu\mu_R)$ | C |
| `SeeRR_1213` | $(\bar{e}_L\mu_R)(\bar{e}_L\tau_R)$ | C |
| `SeeRR_2131` | $(\bar{\mu}_Le_R)(\bar{\tau}_Le_R)$ | C |

**tauetaumu**

| WC name | Operator | Type |
|---|---|---|
| `VeeLL_1323` | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{\mu}_L\gamma_\mu\tau_L)$ | C |
| `VeeRR_1323` | $(\bar{e}_R\gamma^\mu\tau_R)(\bar{\mu}_R\gamma_\mu\tau_R)$ | C |
| `VeeLR_1323` | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{\mu}_R\gamma_\mu\tau_R)$ | C |
| `VeeLR_2313` | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{e}_R\gamma_\mu\tau_R)$ | C |
| `SeeRR_1323` | $(\bar{e}_L\tau_R)(\bar{\mu}_L\tau_R)$ | C |
| `SeeRR_3132` | $(\bar{\tau}_Le_R)(\bar{\tau}_L\mu_R)$ | C |

**nunununu**

| WC name | Operator | Type |
|---|---|---|
| `VnunuLL_1112` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{\nu}_{L1}\gamma_\mu\nu_{L2})$ | C |
| `VnunuLL_1222` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L2})(\bar{\nu}_{L2}\gamma_\mu\nu_{L2})$ | C |
| `VnunuLL_1233` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L2})(\bar{\nu}_{L3}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_1113` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{\nu}_{L1}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_1223` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L2})(\bar{\nu}_{L2}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_1333` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L3})(\bar{\nu}_{L3}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_1123` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{\nu}_{L2}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_2223` | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{\nu}_{L2}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_2333` | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L3})(\bar{\nu}_{L3}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_1232` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L2})(\bar{\nu}_{L3}\gamma_\mu\nu_{L2})$ | C |
| `VnunuLL_1323` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L3})(\bar{\nu}_{L2}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_1213` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L2})(\bar{\nu}_{L1}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_1212` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L2})(\bar{\nu}_{L1}\gamma_\mu\nu_{L2})$ | C |
| `VnunuLL_1313` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L3})(\bar{\nu}_{L1}\gamma_\mu\nu_{L3})$ | C |
| `VnunuLL_2323` | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L3})(\bar{\nu}_{L2}\gamma_\mu\nu_{L3})$ | C |

**nunuemu**

| WC name | Operator | Type |
|---|---|---|
| `VnueLL_1212` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L2})(\bar{e}_L\gamma_\mu\mu_L)$ | C |
| `VnueLR_1212` | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L2})(\bar{e}_R\gamma_\mu\mu_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| VnueLL_1312 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{e}_{L}\gamma_{\mu}\mu_{L})$ | C |
| VnueLR_1312 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{e}_{R}\gamma_{\mu}\mu_{R})$ | C |
| VnueLL_2321 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\mu}_{L}\gamma_{\mu}e_{L})$ | C |
| VnueLR_2321 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\mu}_{R}\gamma_{\mu}e_{R})$ | C |

**nunumue**

| WC name | Operator | Type |
|---|---|---|
| VnueLL_1221 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{\mu}_{L}\gamma_{\mu}e_{L})$ | C |
| VnueLR_1221 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{\mu}_{R}\gamma_{\mu}e_{R})$ | C |
| VnueLL_1321 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{\mu}_{L}\gamma_{\mu}e_{L})$ | C |
| VnueLR_1321 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{\mu}_{R}\gamma_{\mu}e_{R})$ | C |
| VnueLL_2312 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{e}_{L}\gamma_{\mu}\mu_{L})$ | C |
| VnueLR_2312 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{e}_{R}\gamma_{\mu}\mu_{R})$ | C |

**nunutaumu**

| WC name | Operator | Type |
|---|---|---|
| VnueLL_1232 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{\tau}_{L}\gamma_{\mu}\mu_{L})$ | C |
| VnueLR_1232 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{\tau}_{R}\gamma_{\mu}\mu_{R})$ | C |
| VnueLL_1332 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{\tau}_{L}\gamma_{\mu}\mu_{L})$ | C |
| VnueLR_1332 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{\tau}_{R}\gamma_{\mu}\mu_{R})$ | C |
| VnueLL_2323 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\mu}_{L}\gamma_{\mu}\tau_{L})$ | C |
| VnueLR_2323 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\mu}_{R}\gamma_{\mu}\tau_{R})$ | C |

**nunumutau**

| WC name | Operator | Type |
|---|---|---|
| VnueLL_1223 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{\mu}_{L}\gamma_{\mu}\tau_{L})$ | C |
| VnueLR_1223 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{\mu}_{R}\gamma_{\mu}\tau_{R})$ | C |
| VnueLL_1323 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{\mu}_{L}\gamma_{\mu}\tau_{L})$ | C |
| VnueLR_1323 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{\mu}_{R}\gamma_{\mu}\tau_{R})$ | C |
| VnueLL_2332 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\tau}_{L}\gamma_{\mu}\mu_{L})$ | C |
| VnueLR_2332 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\tau}_{R}\gamma_{\mu}\mu_{R})$ | C |

**nunutaue**

| WC name | Operator | Type |
|---------|----------|------|
| `VnueLL_1231` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{\tau}_L\gamma_{\mu}e_L)$ | C |
| `VnueLR_1231` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{\tau}_R\gamma_{\mu}e_R)$ | C |
| `VnueLL_1331` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{\tau}_L\gamma_{\mu}e_L)$ | C |
| `VnueLR_1331` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{\tau}_R\gamma_{\mu}e_R)$ | C |
| `VnueLL_2313` | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{e}_L\gamma_{\mu}\tau_L)$ | C |
| `VnueLR_2313` | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{e}_R\gamma_{\mu}\tau_R)$ | C |

**`nunuetau`**

| WC name | Operator | Type |
|---------|----------|------|
| `VnueLL_1213` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{e}_L\gamma_{\mu}\tau_L)$ | C |
| `VnueLR_1213` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{e}_R\gamma_{\mu}\tau_R)$ | C |
| `VnueLL_1313` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{e}_L\gamma_{\mu}\tau_L)$ | C |
| `VnueLR_1313` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{e}_R\gamma_{\mu}\tau_R)$ | C |
| `VnueLL_2331` | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\tau}_L\gamma_{\mu}e_L)$ | C |
| `VnueLR_2331` | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\tau}_R\gamma_{\mu}e_R)$ | C |

**`dF=0`**

| WC name | Operator | Type |
|---------|----------|------|
| `egamma_11` | $\bar{e}_L\sigma^{\mu\nu}e_R\,F_{\mu\nu}$ | C |
| `egamma_22` | $\bar{\mu}_L\sigma^{\mu\nu}\mu_R\,F_{\mu\nu}$ | C |
| `egamma_33` | $\bar{\tau}_L\sigma^{\mu\nu}\tau_R\,F_{\mu\nu}$ | C |
| `ugamma_11` | $\bar{u}_L\sigma^{\mu\nu}u_R\,F_{\mu\nu}$ | C |
| `ugamma_22` | $\bar{c}_L\sigma^{\mu\nu}c_R\,F_{\mu\nu}$ | C |
| `dgamma_11` | $\bar{d}_L\sigma^{\mu\nu}d_R\,F_{\mu\nu}$ | C |
| `dgamma_22` | $\bar{s}_L\sigma^{\mu\nu}s_R\,F_{\mu\nu}$ | C |
| `dgamma_33` | $\bar{b}_L\sigma^{\mu\nu}b_R\,F_{\mu\nu}$ | C |
| `uG_11` | $\bar{u}_L\sigma^{\mu\nu}T^A u_R\,G^A_{\mu\nu}$ | C |
| `uG_22` | $\bar{c}_L\sigma^{\mu\nu}T^A c_R\,G^A_{\mu\nu}$ | C |
| `dG_11` | $\bar{d}_L\sigma^{\mu\nu}T^A d_R\,G^A_{\mu\nu}$ | C |
| `dG_22` | $\bar{s}_L\sigma^{\mu\nu}T^A s_R\,G^A_{\mu\nu}$ | C |
| `dG_33` | $\bar{b}_L\sigma^{\mu\nu}T^A b_R\,G^A_{\mu\nu}$ | C |
| `G` | $f^{ABC}G^{A\nu}_{\mu}G^{B\rho}_{\nu}G^{C\mu}_{\rho}$ | R |
| `Gtilde` | $f^{ABC}\widetilde{G}^{A\nu}_{\mu}G^{B\rho}_{\nu}G^{C\mu}_{\rho}$ | R |
| `VnunuLL_1111` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{\nu}_{L1}\gamma_{\mu}\nu_{L1})$ | R |
| `VnunuLL_1122` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{\nu}_{L2}\gamma_{\mu}\nu_{L2})$ | R |
| `VnunuLL_1133` | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{\nu}_{L3}\gamma_{\mu}\nu_{L3})$ | R |
| `VnunuLL_2222` | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{\nu}_{L2}\gamma_{\mu}\nu_{L2})$ | R |
| `VnunuLL_2233` | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{\nu}_{L3}\gamma_{\mu}\nu_{L3})$ | R |

| WC name | Operator | Type |
|---------|----------|------|
| VnunuLL_3333 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{\nu}_{L3}\gamma_\mu\nu_{L3})$ | R |
| VeeLL_1111 | $(\bar{e}_L\gamma^\mu e_L)(\bar{e}_L\gamma_\mu e_L)$ | R |
| VeeLL_1122 | $(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_L\gamma_\mu\mu_L)$ | R |
| VeeLL_1133 | $(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_L\gamma_\mu\tau_L)$ | R |
| VeeLL_2222 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\mu}_L\gamma_\mu\mu_L)$ | R |
| VeeLL_2233 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_L\gamma_\mu\tau_L)$ | R |
| VeeLL_3333 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{\tau}_L\gamma_\mu\tau_L)$ | R |
| VnueLL_1111 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{e}_L\gamma_\mu e_L)$ | R |
| VnueLL_1122 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{\mu}_L\gamma_\mu\mu_L)$ | R |
| VnueLL_1133 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{\tau}_L\gamma_\mu\tau_L)$ | R |
| VnueLL_2211 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{e}_L\gamma_\mu e_L)$ | R |
| VnueLL_2222 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{\mu}_L\gamma_\mu\mu_L)$ | R |
| VnueLL_2233 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{\tau}_L\gamma_\mu\tau_L)$ | R |
| VnueLL_3311 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{e}_L\gamma_\mu e_L)$ | R |
| VnueLL_3322 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{\mu}_L\gamma_\mu\mu_L)$ | R |
| VnueLL_3333 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{\tau}_L\gamma_\mu\tau_L)$ | R |
| VnuuLL_1111 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{u}_L\gamma_\mu u_L)$ | R |
| VnuuLL_1122 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{c}_L\gamma_\mu c_L)$ | R |
| VnuuLL_2211 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{u}_L\gamma_\mu u_L)$ | R |
| VnuuLL_2222 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{c}_L\gamma_\mu c_L)$ | R |
| VnuuLL_3311 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{u}_L\gamma_\mu u_L)$ | R |
| VnuuLL_3322 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{c}_L\gamma_\mu c_L)$ | R |
| VnudLL_1111 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{d}_L\gamma_\mu d_L)$ | R |
| VnudLL_1122 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{s}_L\gamma_\mu s_L)$ | R |
| VnudLL_1133 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{b}_L\gamma_\mu b_L)$ | R |
| VnudLL_2211 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{d}_L\gamma_\mu d_L)$ | R |
| VnudLL_2222 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{s}_L\gamma_\mu s_L)$ | R |
| VnudLL_2233 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{b}_L\gamma_\mu b_L)$ | R |
| VnudLL_3311 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{d}_L\gamma_\mu d_L)$ | R |
| VnudLL_3322 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{s}_L\gamma_\mu s_L)$ | R |
| VnudLL_3333 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{b}_L\gamma_\mu b_L)$ | R |
| VeuLL_1111 | $(\bar{e}_L\gamma^\mu e_L)(\bar{u}_L\gamma_\mu u_L)$ | R |
| VeuLL_1122 | $(\bar{e}_L\gamma^\mu e_L)(\bar{c}_L\gamma_\mu c_L)$ | R |
| VeuLL_2211 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_L\gamma_\mu u_L)$ | R |
| VeuLL_2222 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{c}_L\gamma_\mu c_L)$ | R |
| VeuLL_3311 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{u}_L\gamma_\mu u_L)$ | R |
| VeuLL_3322 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{c}_L\gamma_\mu c_L)$ | R |
| VedLL_1111 | $(\bar{e}_L\gamma^\mu e_L)(\bar{d}_L\gamma_\mu d_L)$ | R |
| VedLL_1122 | $(\bar{e}_L\gamma^\mu e_L)(\bar{s}_L\gamma_\mu s_L)$ | R |
| VedLL_1133 | $(\bar{e}_L\gamma^\mu e_L)(\bar{b}_L\gamma_\mu b_L)$ | R |
| VedLL_2211 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{d}_L\gamma_\mu d_L)$ | R |
| VedLL_2222 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{s}_L\gamma_\mu s_L)$ | R |
| VedLL_2233 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{b}_L\gamma_\mu b_L)$ | R |

| WC name | Operator | Type |
|---|---|---|
| VedLL_3311 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{d}_L\gamma_\mu d_L)$ | R |
| VedLL_3322 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{s}_L\gamma_\mu s_L)$ | R |
| VedLL_3333 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{b}_L\gamma_\mu b_L)$ | R |
| VuuLL_1111 | $(\bar{u}_L\gamma^\mu u_L)(\bar{u}_L\gamma_\mu u_L)$ | R |
| VuuLL_1122 | $(\bar{u}_L\gamma^\mu u_L)(\bar{c}_L\gamma_\mu c_L)$ | R |
| VuuLL_1221 | $(\bar{u}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu u_L)$ | R |
| VuuLL_2222 | $(\bar{c}_L\gamma^\mu c_L)(\bar{c}_L\gamma_\mu c_L)$ | R |
| VddLL_1111 | $(\bar{d}_L\gamma^\mu d_L)(\bar{d}_L\gamma_\mu d_L)$ | R |
| VddLL_1122 | $(\bar{d}_L\gamma^\mu d_L)(\bar{s}_L\gamma_\mu s_L)$ | R |
| VddLL_1133 | $(\bar{d}_L\gamma^\mu d_L)(\bar{b}_L\gamma_\mu b_L)$ | R |
| VddLL_1221 | $(\bar{d}_L\gamma^\mu s_L)(\bar{s}_L\gamma_\mu d_L)$ | R |
| VddLL_1331 | $(\bar{d}_L\gamma^\mu b_L)(\bar{b}_L\gamma_\mu d_L)$ | R |
| VddLL_2222 | $(\bar{s}_L\gamma^\mu s_L)(\bar{s}_L\gamma_\mu s_L)$ | R |
| VddLL_2233 | $(\bar{s}_L\gamma^\mu s_L)(\bar{b}_L\gamma_\mu b_L)$ | R |
| VddLL_2332 | $(\bar{s}_L\gamma^\mu b_L)(\bar{b}_L\gamma_\mu s_L)$ | R |
| VddLL_3333 | $(\bar{b}_L\gamma^\mu b_L)(\bar{b}_L\gamma_\mu b_L)$ | R |
| V1udLL_1111 | $(\bar{u}_L\gamma^\mu u_L)(\bar{d}_L\gamma_\mu d_L)$ | R |
| V1udLL_1122 | $(\bar{u}_L\gamma^\mu u_L)(\bar{s}_L\gamma_\mu s_L)$ | R |
| V1udLL_1133 | $(\bar{u}_L\gamma^\mu u_L)(\bar{b}_L\gamma_\mu b_L)$ | R |
| V1udLL_2211 | $(\bar{c}_L\gamma^\mu c_L)(\bar{d}_L\gamma_\mu d_L)$ | R |
| V1udLL_2222 | $(\bar{c}_L\gamma^\mu c_L)(\bar{s}_L\gamma_\mu s_L)$ | R |
| V1udLL_2233 | $(\bar{c}_L\gamma^\mu c_L)(\bar{b}_L\gamma_\mu b_L)$ | R |
| V8udLL_1111 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{d}_L\gamma_\mu T^A d_L)$ | R |
| V8udLL_1122 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{s}_L\gamma_\mu T^A s_L)$ | R |
| V8udLL_1133 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{b}_L\gamma_\mu T^A b_L)$ | R |
| V8udLL_2211 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{d}_L\gamma_\mu T^A d_L)$ | R |
| V8udLL_2222 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{s}_L\gamma_\mu T^A s_L)$ | R |
| V8udLL_2233 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{b}_L\gamma_\mu T^A b_L)$ | R |
| VeeRR_1111 | $(\bar{e}_R\gamma^\mu e_R)(\bar{e}_R\gamma_\mu e_R)$ | R |
| VeeRR_1122 | $(\bar{e}_R\gamma^\mu e_R)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VeeRR_1133 | $(\bar{e}_R\gamma^\mu e_R)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VeeRR_2222 | $(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VeeRR_2233 | $(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VeeRR_3333 | $(\bar{\tau}_R\gamma^\mu\tau_R)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VeuRR_1111 | $(\bar{e}_R\gamma^\mu e_R)(\bar{u}_R\gamma_\mu u_R)$ | R |
| VeuRR_1122 | $(\bar{e}_R\gamma^\mu e_R)(\bar{c}_R\gamma_\mu c_R)$ | R |
| VeuRR_2211 | $(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{u}_R\gamma_\mu u_R)$ | R |
| VeuRR_2222 | $(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{c}_R\gamma_\mu c_R)$ | R |
| VeuRR_3311 | $(\bar{\tau}_R\gamma^\mu\tau_R)(\bar{u}_R\gamma_\mu u_R)$ | R |
| VeuRR_3322 | $(\bar{\tau}_R\gamma^\mu\tau_R)(\bar{c}_R\gamma_\mu c_R)$ | R |
| VedRR_1111 | $(\bar{e}_R\gamma^\mu e_R)(\bar{d}_R\gamma_\mu d_R)$ | R |
| VedRR_1122 | $(\bar{e}_R\gamma^\mu e_R)(\bar{s}_R\gamma_\mu s_R)$ | R |
| VedRR_1133 | $(\bar{e}_R\gamma^\mu e_R)(\bar{b}_R\gamma_\mu b_R)$ | R |

| WC name | Operator | Type |
|---|---|---|
| VedRR_2211 | $(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{d}_R\gamma_\mu d_R)$ | R |
| VedRR_2222 | $(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{s}_R\gamma_\mu s_R)$ | R |
| VedRR_2233 | $(\bar{\mu}_R\gamma^\mu\mu_R)(\bar{b}_R\gamma_\mu b_R)$ | R |
| VedRR_3311 | $(\bar{\tau}_R\gamma^\mu\tau_R)(\bar{d}_R\gamma_\mu d_R)$ | R |
| VedRR_3322 | $(\bar{\tau}_R\gamma^\mu\tau_R)(\bar{s}_R\gamma_\mu s_R)$ | R |
| VedRR_3333 | $(\bar{\tau}_R\gamma^\mu\tau_R)(\bar{b}_R\gamma_\mu b_R)$ | R |
| VuuRR_1111 | $(\bar{u}_R\gamma^\mu u_R)(\bar{u}_R\gamma_\mu u_R)$ | R |
| VuuRR_1122 | $(\bar{u}_R\gamma^\mu u_R)(\bar{c}_R\gamma_\mu c_R)$ | R |
| VuuRR_1221 | $(\bar{u}_R\gamma^\mu c_R)(\bar{c}_R\gamma_\mu u_R)$ | R |
| VuuRR_2222 | $(\bar{c}_R\gamma^\mu c_R)(\bar{c}_R\gamma_\mu c_R)$ | R |
| VddRR_1111 | $(\bar{d}_R\gamma^\mu d_R)(\bar{d}_R\gamma_\mu d_R)$ | R |
| VddRR_1122 | $(\bar{d}_R\gamma^\mu d_R)(\bar{s}_R\gamma_\mu s_R)$ | R |
| VddRR_1133 | $(\bar{d}_R\gamma^\mu d_R)(\bar{b}_R\gamma_\mu b_R)$ | R |
| VddRR_1221 | $(\bar{d}_R\gamma^\mu s_R)(\bar{s}_R\gamma_\mu d_R)$ | R |
| VddRR_1331 | $(\bar{d}_R\gamma^\mu b_R)(\bar{b}_R\gamma_\mu d_R)$ | R |
| VddRR_2222 | $(\bar{s}_R\gamma^\mu s_R)(\bar{s}_R\gamma_\mu s_R)$ | R |
| VddRR_2233 | $(\bar{s}_R\gamma^\mu s_R)(\bar{b}_R\gamma_\mu b_R)$ | R |
| VddRR_2332 | $(\bar{s}_R\gamma^\mu b_R)(\bar{b}_R\gamma_\mu s_R)$ | R |
| VddRR_3333 | $(\bar{b}_R\gamma^\mu b_R)(\bar{b}_R\gamma_\mu b_R)$ | R |
| V1udRR_1111 | $(\bar{u}_R\gamma^\mu u_R)(\bar{d}_R\gamma_\mu d_R)$ | R |
| V1udRR_1122 | $(\bar{u}_R\gamma^\mu u_R)(\bar{s}_R\gamma_\mu s_R)$ | R |
| V1udRR_1133 | $(\bar{u}_R\gamma^\mu u_R)(\bar{b}_R\gamma_\mu b_R)$ | R |
| V1udRR_2211 | $(\bar{c}_R\gamma^\mu c_R)(\bar{d}_R\gamma_\mu d_R)$ | R |
| V1udRR_2222 | $(\bar{c}_R\gamma^\mu c_R)(\bar{s}_R\gamma_\mu s_R)$ | R |
| V1udRR_2233 | $(\bar{c}_R\gamma^\mu c_R)(\bar{b}_R\gamma_\mu b_R)$ | R |
| V8udRR_1111 | $(\bar{u}_R\gamma^\mu T^A u_R)(\bar{d}_R\gamma_\mu T^A d_R)$ | R |
| V8udRR_1122 | $(\bar{u}_R\gamma^\mu T^A u_R)(\bar{s}_R\gamma_\mu T^A s_R)$ | R |
| V8udRR_1133 | $(\bar{u}_R\gamma^\mu T^A u_R)(\bar{b}_R\gamma_\mu T^A b_R)$ | R |
| V8udRR_2211 | $(\bar{c}_R\gamma^\mu T^A c_R)(\bar{d}_R\gamma_\mu T^A d_R)$ | R |
| V8udRR_2222 | $(\bar{c}_R\gamma^\mu T^A c_R)(\bar{s}_R\gamma_\mu T^A s_R)$ | R |
| V8udRR_2233 | $(\bar{c}_R\gamma^\mu T^A c_R)(\bar{b}_R\gamma_\mu T^A b_R)$ | R |
| VnueLR_1111 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{e}_R\gamma_\mu e_R)$ | R |
| VnueLR_1122 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VnueLR_1133 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VnueLR_2211 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{e}_R\gamma_\mu e_R)$ | R |
| VnueLR_2222 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VnueLR_2233 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VnueLR_3311 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{e}_R\gamma_\mu e_R)$ | R |
| VnueLR_3322 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VnueLR_3333 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VeeLR_1111 | $(\bar{e}_L\gamma^\mu e_L)(\bar{e}_R\gamma_\mu e_R)$ | R |
| VeeLR_1122 | $(\bar{e}_L\gamma^\mu e_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VeeLR_1133 | $(\bar{e}_L\gamma^\mu e_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |

| WC name | Operator | Type |
|---|---|---|
| VeeLR_1221 | $(\bar{e}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu e_R)$ | C |
| VeeLR_1331 | $(\bar{e}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu e_R)$ | C |
| VeeLR_2211 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{e}_R\gamma_\mu e_R)$ | R |
| VeeLR_2222 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VeeLR_2233 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VeeLR_2332 | $(\bar{\mu}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu\mu_R)$ | C |
| VeeLR_3311 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{e}_R\gamma_\mu e_R)$ | R |
| VeeLR_3322 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VeeLR_3333 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VnuuLR_1111 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{u}_R\gamma_\mu u_R)$ | R |
| VnuuLR_1122 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{c}_R\gamma_\mu c_R)$ | R |
| VnuuLR_2211 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{u}_R\gamma_\mu u_R)$ | R |
| VnuuLR_2222 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{c}_R\gamma_\mu c_R)$ | R |
| VnuuLR_3311 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{u}_R\gamma_\mu u_R)$ | R |
| VnuuLR_3322 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{c}_R\gamma_\mu c_R)$ | R |
| VnudLR_1111 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{d}_R\gamma_\mu d_R)$ | R |
| VnudLR_1122 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{s}_R\gamma_\mu s_R)$ | R |
| VnudLR_1133 | $(\bar{\nu}_{L1}\gamma^\mu\nu_{L1})(\bar{b}_R\gamma_\mu b_R)$ | R |
| VnudLR_2211 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{d}_R\gamma_\mu d_R)$ | R |
| VnudLR_2222 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{s}_R\gamma_\mu s_R)$ | R |
| VnudLR_2233 | $(\bar{\nu}_{L2}\gamma^\mu\nu_{L2})(\bar{b}_R\gamma_\mu b_R)$ | R |
| VnudLR_3311 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{d}_R\gamma_\mu d_R)$ | R |
| VnudLR_3322 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{s}_R\gamma_\mu s_R)$ | R |
| VnudLR_3333 | $(\bar{\nu}_{L3}\gamma^\mu\nu_{L3})(\bar{b}_R\gamma_\mu b_R)$ | R |
| VeuLR_1111 | $(\bar{e}_L\gamma^\mu e_L)(\bar{u}_R\gamma_\mu u_R)$ | R |
| VeuLR_1122 | $(\bar{e}_L\gamma^\mu e_L)(\bar{c}_R\gamma_\mu c_R)$ | R |
| VeuLR_2211 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{u}_R\gamma_\mu u_R)$ | R |
| VeuLR_2222 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{c}_R\gamma_\mu c_R)$ | R |
| VeuLR_3311 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{u}_R\gamma_\mu u_R)$ | R |
| VeuLR_3322 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{c}_R\gamma_\mu c_R)$ | R |
| VedLR_1111 | $(\bar{e}_L\gamma^\mu e_L)(\bar{d}_R\gamma_\mu d_R)$ | R |
| VedLR_1122 | $(\bar{e}_L\gamma^\mu e_L)(\bar{s}_R\gamma_\mu s_R)$ | R |
| VedLR_1133 | $(\bar{e}_L\gamma^\mu e_L)(\bar{b}_R\gamma_\mu b_R)$ | R |
| VedLR_2211 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{d}_R\gamma_\mu d_R)$ | R |
| VedLR_2222 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{s}_R\gamma_\mu s_R)$ | R |
| VedLR_2233 | $(\bar{\mu}_L\gamma^\mu\mu_L)(\bar{b}_R\gamma_\mu b_R)$ | R |
| VedLR_3311 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{d}_R\gamma_\mu d_R)$ | R |
| VedLR_3322 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{s}_R\gamma_\mu s_R)$ | R |
| VedLR_3333 | $(\bar{\tau}_L\gamma^\mu\tau_L)(\bar{b}_R\gamma_\mu b_R)$ | R |
| VueLR_1111 | $(\bar{u}_L\gamma^\mu u_L)(\bar{e}_R\gamma_\mu e_R)$ | R |
| VueLR_1122 | $(\bar{u}_L\gamma^\mu u_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VueLR_1133 | $(\bar{u}_L\gamma^\mu u_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VueLR_2211 | $(\bar{c}_L\gamma^\mu c_L)(\bar{e}_R\gamma_\mu e_R)$ | R |

| WC name | Operator | Type |
|---|---|---|
| VueLR_2222 | $(\bar{c}_L\gamma^\mu c_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VueLR_2233 | $(\bar{c}_L\gamma^\mu c_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VdeLR_1111 | $(\bar{d}_L\gamma^\mu d_L)(\bar{e}_R\gamma_\mu e_R)$ | R |
| VdeLR_1122 | $(\bar{d}_L\gamma^\mu d_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VdeLR_1133 | $(\bar{d}_L\gamma^\mu d_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VdeLR_2211 | $(\bar{s}_L\gamma^\mu s_L)(\bar{e}_R\gamma_\mu e_R)$ | R |
| VdeLR_2222 | $(\bar{s}_L\gamma^\mu s_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VdeLR_2233 | $(\bar{s}_L\gamma^\mu s_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| VdeLR_3311 | $(\bar{b}_L\gamma^\mu b_L)(\bar{e}_R\gamma_\mu e_R)$ | R |
| VdeLR_3322 | $(\bar{b}_L\gamma^\mu b_L)(\bar{\mu}_R\gamma_\mu\mu_R)$ | R |
| VdeLR_3333 | $(\bar{b}_L\gamma^\mu b_L)(\bar{\tau}_R\gamma_\mu\tau_R)$ | R |
| V1uuLR_1111 | $(\bar{u}_L\gamma^\mu u_L)(\bar{u}_R\gamma_\mu u_R)$ | R |
| V1uuLR_1122 | $(\bar{u}_L\gamma^\mu u_L)(\bar{c}_R\gamma_\mu c_R)$ | R |
| V1uuLR_1221 | $(\bar{u}_L\gamma^\mu c_L)(\bar{c}_R\gamma_\mu u_R)$ | C |
| V1uuLR_2211 | $(\bar{c}_L\gamma^\mu c_L)(\bar{u}_R\gamma_\mu u_R)$ | R |
| V1uuLR_2222 | $(\bar{c}_L\gamma^\mu c_L)(\bar{c}_R\gamma_\mu c_R)$ | R |
| V8uuLR_1111 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{u}_R\gamma_\mu T^A u_R)$ | R |
| V8uuLR_1122 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{c}_R\gamma_\mu T^A c_R)$ | R |
| V8uuLR_1221 | $(\bar{u}_L\gamma^\mu T^A c_L)(\bar{c}_R\gamma_\mu T^A u_R)$ | C |
| V8uuLR_2211 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{u}_R\gamma_\mu T^A u_R)$ | R |
| V8uuLR_2222 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{c}_R\gamma_\mu T^A c_R)$ | R |
| V1udLR_1111 | $(\bar{u}_L\gamma^\mu u_L)(\bar{d}_R\gamma_\mu d_R)$ | R |
| V1udLR_1122 | $(\bar{u}_L\gamma^\mu u_L)(\bar{s}_R\gamma_\mu s_R)$ | R |
| V1udLR_1133 | $(\bar{u}_L\gamma^\mu u_L)(\bar{b}_R\gamma_\mu b_R)$ | R |
| V1udLR_2211 | $(\bar{c}_L\gamma^\mu c_L)(\bar{d}_R\gamma_\mu d_R)$ | R |
| V1udLR_2222 | $(\bar{c}_L\gamma^\mu c_L)(\bar{s}_R\gamma_\mu s_R)$ | R |
| V1udLR_2233 | $(\bar{c}_L\gamma^\mu c_L)(\bar{b}_R\gamma_\mu b_R)$ | R |
| V8udLR_1111 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | R |
| V8udLR_1122 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | R |
| V8udLR_1133 | $(\bar{u}_L\gamma^\mu T^A u_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | R |
| V8udLR_2211 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | R |
| V8udLR_2222 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | R |
| V8udLR_2233 | $(\bar{c}_L\gamma^\mu T^A c_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | R |
| V1duLR_1111 | $(\bar{d}_L\gamma^\mu d_L)(\bar{u}_R\gamma_\mu u_R)$ | R |
| V1duLR_1122 | $(\bar{d}_L\gamma^\mu d_L)(\bar{c}_R\gamma_\mu c_R)$ | R |
| V1duLR_2211 | $(\bar{s}_L\gamma^\mu s_L)(\bar{u}_R\gamma_\mu u_R)$ | R |
| V1duLR_2222 | $(\bar{s}_L\gamma^\mu s_L)(\bar{c}_R\gamma_\mu c_R)$ | R |
| V1duLR_3311 | $(\bar{b}_L\gamma^\mu b_L)(\bar{u}_R\gamma_\mu u_R)$ | R |
| V1duLR_3322 | $(\bar{b}_L\gamma^\mu b_L)(\bar{c}_R\gamma_\mu c_R)$ | R |
| V8duLR_1111 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{u}_R\gamma_\mu T^A u_R)$ | R |
| V8duLR_1122 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{c}_R\gamma_\mu T^A c_R)$ | R |
| V8duLR_2211 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{u}_R\gamma_\mu T^A u_R)$ | R |
| V8duLR_2222 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{c}_R\gamma_\mu T^A c_R)$ | R |

| WC name | Operator | Type |
|---|---|---|
| V8duLR_3311 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{u}_R\gamma_\mu T^A u_R)$ | R |
| V8duLR_3322 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{c}_R\gamma_\mu T^A c_R)$ | R |
| V1ddLR_1111 | $(\bar{d}_L\gamma^\mu d_L)(\bar{d}_R\gamma_\mu d_R)$ | R |
| V1ddLR_1122 | $(\bar{d}_L\gamma^\mu d_L)(\bar{s}_R\gamma_\mu s_R)$ | R |
| V1ddLR_1133 | $(\bar{d}_L\gamma^\mu d_L)(\bar{b}_R\gamma_\mu b_R)$ | R |
| V1ddLR_1221 | $(\bar{d}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu d_R)$ | C |
| V1ddLR_1331 | $(\bar{d}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu d_R)$ | C |
| V1ddLR_2211 | $(\bar{s}_L\gamma^\mu s_L)(\bar{d}_R\gamma_\mu d_R)$ | R |
| V1ddLR_2222 | $(\bar{s}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu s_R)$ | R |
| V1ddLR_2233 | $(\bar{s}_L\gamma^\mu s_L)(\bar{b}_R\gamma_\mu b_R)$ | R |
| V1ddLR_2332 | $(\bar{s}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu s_R)$ | C |
| V1ddLR_3311 | $(\bar{b}_L\gamma^\mu b_L)(\bar{d}_R\gamma_\mu d_R)$ | R |
| V1ddLR_3322 | $(\bar{b}_L\gamma^\mu b_L)(\bar{s}_R\gamma_\mu s_R)$ | R |
| V1ddLR_3333 | $(\bar{b}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu b_R)$ | R |
| V8ddLR_1111 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | R |
| V8ddLR_1122 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | R |
| V8ddLR_1133 | $(\bar{d}_L\gamma^\mu T^A d_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | R |
| V8ddLR_1221 | $(\bar{d}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A d_R)$ | C |
| V8ddLR_1331 | $(\bar{d}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A d_R)$ | C |
| V8ddLR_2211 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | R |
| V8ddLR_2222 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | R |
| V8ddLR_2233 | $(\bar{s}_L\gamma^\mu T^A s_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | R |
| V8ddLR_2332 | $(\bar{s}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A s_R)$ | C |
| V8ddLR_3311 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{d}_R\gamma_\mu T^A d_R)$ | R |
| V8ddLR_3322 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{s}_R\gamma_\mu T^A s_R)$ | R |
| V8ddLR_3333 | $(\bar{b}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A b_R)$ | R |
| V1udduLR_1111 | $(\bar{u}_L\gamma^\mu d_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| V1udduLR_1221 | $(\bar{u}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu u_R)$ | C |
| V1udduLR_1331 | $(\bar{u}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu u_R)$ | C |
| V1udduLR_2112 | $(\bar{c}_L\gamma^\mu d_L)(\bar{d}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2222 | $(\bar{c}_L\gamma^\mu s_L)(\bar{s}_R\gamma_\mu c_R)$ | C |
| V1udduLR_2332 | $(\bar{c}_L\gamma^\mu b_L)(\bar{b}_R\gamma_\mu c_R)$ | C |
| V8udduLR_1111 | $(\bar{u}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_1221 | $(\bar{u}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_1331 | $(\bar{u}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A u_R)$ | C |
| V8udduLR_2112 | $(\bar{c}_L\gamma^\mu T^A d_L)(\bar{d}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2222 | $(\bar{c}_L\gamma^\mu T^A s_L)(\bar{s}_R\gamma_\mu T^A c_R)$ | C |
| V8udduLR_2332 | $(\bar{c}_L\gamma^\mu T^A b_L)(\bar{b}_R\gamma_\mu T^A c_R)$ | C |
| SeuRL_1111 | $(\bar{e}_L e_R)(\bar{u}_R u_L)$ | C |
| SeuRL_1122 | $(\bar{e}_L e_R)(\bar{c}_R c_L)$ | C |
| SeuRL_2211 | $(\bar{\mu}_L \mu_R)(\bar{u}_R u_L)$ | C |
| SeuRL_2222 | $(\bar{\mu}_L \mu_R)(\bar{c}_R c_L)$ | C |

| WC name | Operator | Type |
|---|---|---|
| SeuRL_3311 | $(\bar{\tau}_L\tau_R)(\bar{u}_R u_L)$ | C |
| SeuRL_3322 | $(\bar{\tau}_L\tau_R)(\bar{c}_R c_L)$ | C |
| SedRL_1111 | $(\bar{e}_L e_R)(\bar{d}_R d_L)$ | C |
| SedRL_1122 | $(\bar{e}_L e_R)(\bar{s}_R s_L)$ | C |
| SedRL_1133 | $(\bar{e}_L e_R)(\bar{b}_R b_L)$ | C |
| SedRL_2211 | $(\bar{\mu}_L\mu_R)(\bar{d}_R d_L)$ | C |
| SedRL_2222 | $(\bar{\mu}_L\mu_R)(\bar{s}_R s_L)$ | C |
| SedRL_2233 | $(\bar{\mu}_L\mu_R)(\bar{b}_R b_L)$ | C |
| SedRL_3311 | $(\bar{\tau}_L\tau_R)(\bar{d}_R d_L)$ | C |
| SedRL_3322 | $(\bar{\tau}_L\tau_R)(\bar{s}_R s_L)$ | C |
| SedRL_3333 | $(\bar{\tau}_L\tau_R)(\bar{b}_R b_L)$ | C |
| SeeRR_1111 | $(\bar{e}_L e_R)(\bar{e}_L e_R)$ | C |
| SeeRR_1122 | $(\bar{e}_L e_R)(\bar{\mu}_L\mu_R)$ | C |
| SeeRR_1133 | $(\bar{e}_L e_R)(\bar{\tau}_L\tau_R)$ | C |
| SeeRR_1221 | $(\bar{e}_L \mu_R)(\bar{\mu}_L e_R)$ | C |
| SeeRR_1331 | $(\bar{e}_L \tau_R)(\bar{\tau}_L e_R)$ | C |
| SeeRR_2222 | $(\bar{\mu}_L\mu_R)(\bar{\mu}_L\mu_R)$ | C |
| SeeRR_2233 | $(\bar{\mu}_L\mu_R)(\bar{\tau}_L\tau_R)$ | C |
| SeeRR_2332 | $(\bar{\mu}_L\tau_R)(\bar{\tau}_L\mu_R)$ | C |
| SeeRR_3333 | $(\bar{\tau}_L\tau_R)(\bar{\tau}_L\tau_R)$ | C |
| SeuRR_1111 | $(\bar{e}_L e_R)(\bar{u}_L u_R)$ | C |
| SeuRR_1122 | $(\bar{e}_L e_R)(\bar{c}_L c_R)$ | C |
| SeuRR_2211 | $(\bar{\mu}_L\mu_R)(\bar{u}_L u_R)$ | C |
| SeuRR_2222 | $(\bar{\mu}_L\mu_R)(\bar{c}_L c_R)$ | C |
| SeuRR_3311 | $(\bar{\tau}_L\tau_R)(\bar{u}_L u_R)$ | C |
| SeuRR_3322 | $(\bar{\tau}_L\tau_R)(\bar{c}_L c_R)$ | C |
| TeuRR_1111 | $(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{u}_L\sigma_{\mu\nu}u_R)$ | C |
| TeuRR_1122 | $(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{c}_L\sigma_{\mu\nu}c_R)$ | C |
| TeuRR_2211 | $(\bar{\mu}_L\sigma^{\mu\nu}\mu_R)(\bar{u}_L\sigma_{\mu\nu}u_R)$ | C |
| TeuRR_2222 | $(\bar{\mu}_L\sigma^{\mu\nu}\mu_R)(\bar{c}_L\sigma_{\mu\nu}c_R)$ | C |
| TeuRR_3311 | $(\bar{\tau}_L\sigma^{\mu\nu}\tau_R)(\bar{u}_L\sigma_{\mu\nu}u_R)$ | C |
| TeuRR_3322 | $(\bar{\tau}_L\sigma^{\mu\nu}\tau_R)(\bar{c}_L\sigma_{\mu\nu}c_R)$ | C |
| SedRR_1111 | $(\bar{e}_L e_R)(\bar{d}_L d_R)$ | C |
| SedRR_1122 | $(\bar{e}_L e_R)(\bar{s}_L s_R)$ | C |
| SedRR_1133 | $(\bar{e}_L e_R)(\bar{b}_L b_R)$ | C |
| SedRR_2211 | $(\bar{\mu}_L\mu_R)(\bar{d}_L d_R)$ | C |
| SedRR_2222 | $(\bar{\mu}_L\mu_R)(\bar{s}_L s_R)$ | C |
| SedRR_2233 | $(\bar{\mu}_L\mu_R)(\bar{b}_L b_R)$ | C |
| SedRR_3311 | $(\bar{\tau}_L\tau_R)(\bar{d}_L d_R)$ | C |
| SedRR_3322 | $(\bar{\tau}_L\tau_R)(\bar{s}_L s_R)$ | C |
| SedRR_3333 | $(\bar{\tau}_L\tau_R)(\bar{b}_L b_R)$ | C |
| TedRR_1111 | $(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_1122 | $(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}s_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| TedRR_1133 | $(\bar{e}_L\sigma^{\mu\nu}e_R)(\bar{b}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_2211 | $(\bar{\mu}_L\sigma^{\mu\nu}\mu_R)(\bar{d}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_2222 | $(\bar{\mu}_L\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}s_R)$ | C |
| TedRR_2233 | $(\bar{\mu}_L\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}b_R)$ | C |
| TedRR_3311 | $(\bar{\tau}_L\sigma^{\mu\nu}\tau_R)(\bar{d}_L\sigma_{\mu\nu}d_R)$ | C |
| TedRR_3322 | $(\bar{\tau}_L\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}s_R)$ | C |
| TedRR_3333 | $(\bar{\tau}_L\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}b_R)$ | C |
| S1uuRR_1111 | $(\bar{u}_Lu_R)(\bar{u}_Lu_R)$ | C |
| S1uuRR_1122 | $(\bar{u}_Lu_R)(\bar{c}_Lc_R)$ | C |
| S1uuRR_1221 | $(\bar{u}_Lc_R)(\bar{c}_Lu_R)$ | C |
| S1uuRR_2222 | $(\bar{c}_Lc_R)(\bar{c}_Lc_R)$ | C |
| S8uuRR_1111 | $(\bar{u}_LT^Au_R)(\bar{u}_LT^Au_R)$ | C |
| S8uuRR_1122 | $(\bar{u}_LT^Au_R)(\bar{c}_LT^Ac_R)$ | C |
| S8uuRR_1221 | $(\bar{u}_LT^Ac_R)(\bar{c}_LT^Au_R)$ | C |
| S8uuRR_2222 | $(\bar{c}_LT^Ac_R)(\bar{c}_LT^Ac_R)$ | C |
| S1udRR_1111 | $(\bar{u}_Lu_R)(\bar{d}_Ld_R)$ | C |
| S1udRR_1122 | $(\bar{u}_Lu_R)(\bar{s}_Ls_R)$ | C |
| S1udRR_1133 | $(\bar{u}_Lu_R)(\bar{b}_Lb_R)$ | C |
| S1udRR_2211 | $(\bar{c}_Lc_R)(\bar{d}_Ld_R)$ | C |
| S1udRR_2222 | $(\bar{c}_Lc_R)(\bar{s}_Ls_R)$ | C |
| S1udRR_2233 | $(\bar{c}_Lc_R)(\bar{b}_Lb_R)$ | C |
| S8udRR_1111 | $(\bar{u}_LT^Au_R)(\bar{d}_LT^Ad_R)$ | C |
| S8udRR_1122 | $(\bar{u}_LT^Au_R)(\bar{s}_LT^As_R)$ | C |
| S8udRR_1133 | $(\bar{u}_LT^Au_R)(\bar{b}_LT^Ab_R)$ | C |
| S8udRR_2211 | $(\bar{c}_LT^Ac_R)(\bar{d}_LT^Ad_R)$ | C |
| S8udRR_2222 | $(\bar{c}_LT^Ac_R)(\bar{s}_LT^As_R)$ | C |
| S8udRR_2233 | $(\bar{c}_LT^Ac_R)(\bar{b}_LT^Ab_R)$ | C |
| S1ddRR_1111 | $(\bar{d}_Ld_R)(\bar{d}_Ld_R)$ | C |
| S1ddRR_1122 | $(\bar{d}_Ld_R)(\bar{s}_Ls_R)$ | C |
| S1ddRR_1133 | $(\bar{d}_Ld_R)(\bar{b}_Lb_R)$ | C |
| S1ddRR_1221 | $(\bar{d}_Ls_R)(\bar{s}_Ld_R)$ | C |
| S1ddRR_1331 | $(\bar{d}_Lb_R)(\bar{b}_Ld_R)$ | C |
| S1ddRR_2222 | $(\bar{s}_Ls_R)(\bar{s}_Ls_R)$ | C |
| S1ddRR_2233 | $(\bar{s}_Ls_R)(\bar{b}_Lb_R)$ | C |
| S1ddRR_2332 | $(\bar{s}_Lb_R)(\bar{b}_Ls_R)$ | C |
| S1ddRR_3333 | $(\bar{b}_Lb_R)(\bar{b}_Lb_R)$ | C |
| S8ddRR_1111 | $(\bar{d}_LT^Ad_R)(\bar{d}_LT^Ad_R)$ | C |
| S8ddRR_1122 | $(\bar{d}_LT^Ad_R)(\bar{s}_LT^As_R)$ | C |
| S8ddRR_1133 | $(\bar{d}_LT^Ad_R)(\bar{b}_LT^Ab_R)$ | C |
| S8ddRR_1221 | $(\bar{d}_LT^As_R)(\bar{s}_LT^Ad_R)$ | C |
| S8ddRR_1331 | $(\bar{d}_LT^Ab_R)(\bar{b}_LT^Ad_R)$ | C |
| S8ddRR_2222 | $(\bar{s}_LT^As_R)(\bar{s}_LT^As_R)$ | C |
| S8ddRR_2233 | $(\bar{s}_LT^As_R)(\bar{b}_LT^Ab_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| S8ddRR_2332 | $(\bar{s}_L T^A b_R)(\bar{b}_L T^A s_R)$ | C |
| S8ddRR_3333 | $(\bar{b}_L T^A b_R)(\bar{b}_L T^A b_R)$ | C |
| S1udduRR_1111 | $(\bar{u}_L d_R)(\bar{d}_L u_R)$ | C |
| S1udduRR_1221 | $(\bar{u}_L s_R)(\bar{s}_L u_R)$ | C |
| S1udduRR_1331 | $(\bar{u}_L b_R)(\bar{b}_L u_R)$ | C |
| S1udduRR_2112 | $(\bar{c}_L d_R)(\bar{d}_L c_R)$ | C |
| S1udduRR_2222 | $(\bar{c}_L s_R)(\bar{s}_L c_R)$ | C |
| S1udduRR_2332 | $(\bar{c}_L b_R)(\bar{b}_L c_R)$ | C |
| S8udduRR_1111 | $(\bar{u}_L T^A d_R)(\bar{d}_L T^A u_R)$ | C |
| S8udduRR_1221 | $(\bar{u}_L T^A s_R)(\bar{s}_L T^A u_R)$ | C |
| S8udduRR_1331 | $(\bar{u}_L T^A b_R)(\bar{b}_L T^A u_R)$ | C |
| S8udduRR_2112 | $(\bar{c}_L T^A d_R)(\bar{d}_L T^A c_R)$ | C |
| S8udduRR_2222 | $(\bar{c}_L T^A s_R)(\bar{s}_L T^A c_R)$ | C |
| S8udduRR_2332 | $(\bar{c}_L T^A b_R)(\bar{b}_L T^A c_R)$ | C |
| VnueLL_1211 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{e}_L \gamma_\mu e_L)$ | C |
| VnueLL_1222 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{\mu}_L \gamma_\mu \mu_L)$ | C |
| VnueLL_1233 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{\tau}_L \gamma_\mu \tau_L)$ | C |
| VnuuLL_1211 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{u}_L \gamma_\mu u_L)$ | C |
| VnuuLL_1222 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{c}_L \gamma_\mu c_L)$ | C |
| VnudLL_1211 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{d}_L \gamma_\mu d_L)$ | C |
| VnudLL_1222 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{s}_L \gamma_\mu s_L)$ | C |
| VnudLL_1233 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{b}_L \gamma_\mu b_L)$ | C |
| VnueLR_1211 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{e}_R \gamma_\mu e_R)$ | C |
| VnueLR_1222 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{\mu}_R \gamma_\mu \mu_R)$ | C |
| VnueLR_1233 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{\tau}_R \gamma_\mu \tau_R)$ | C |
| VnuuLR_1211 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{u}_R \gamma_\mu u_R)$ | C |
| VnuuLR_1222 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{c}_R \gamma_\mu c_R)$ | C |
| VnudLR_1211 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{d}_R \gamma_\mu d_R)$ | C |
| VnudLR_1222 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{s}_R \gamma_\mu s_R)$ | C |
| VnudLR_1233 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L2})(\bar{b}_R \gamma_\mu b_R)$ | C |
| VnueLL_1311 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{e}_L \gamma_\mu e_L)$ | C |
| VnueLL_1322 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{\mu}_L \gamma_\mu \mu_L)$ | C |
| VnueLL_1333 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{\tau}_L \gamma_\mu \tau_L)$ | C |
| VnuuLL_1311 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{u}_L \gamma_\mu u_L)$ | C |
| VnuuLL_1322 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{c}_L \gamma_\mu c_L)$ | C |
| VnudLL_1311 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{d}_L \gamma_\mu d_L)$ | C |
| VnudLL_1322 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{s}_L \gamma_\mu s_L)$ | C |
| VnudLL_1333 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{b}_L \gamma_\mu b_L)$ | C |
| VnueLR_1311 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{e}_R \gamma_\mu e_R)$ | C |
| VnueLR_1322 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{\mu}_R \gamma_\mu \mu_R)$ | C |
| VnueLR_1333 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{\tau}_R \gamma_\mu \tau_R)$ | C |
| VnuuLR_1311 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{u}_R \gamma_\mu u_R)$ | C |
| VnuuLR_1322 | $(\bar{\nu}_{L1}\gamma^\mu \nu_{L3})(\bar{c}_R \gamma_\mu c_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| VnudLR_1311 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{d}_R\gamma_{\mu}d_R)$ | C |
| VnudLR_1322 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{s}_R\gamma_{\mu}s_R)$ | C |
| VnudLR_1333 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{b}_R\gamma_{\mu}b_R)$ | C |
| VnueLL_2311 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{e}_L\gamma_{\mu}e_L)$ | C |
| VnueLL_2322 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\mu}_L\gamma_{\mu}\mu_L)$ | C |
| VnueLL_2333 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\tau}_L\gamma_{\mu}\tau_L)$ | C |
| VnuuLL_2311 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{u}_L\gamma_{\mu}u_L)$ | C |
| VnuuLL_2322 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{c}_L\gamma_{\mu}c_L)$ | C |
| VnudLL_2311 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{d}_L\gamma_{\mu}d_L)$ | C |
| VnudLL_2322 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{s}_L\gamma_{\mu}s_L)$ | C |
| VnudLL_2333 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{b}_L\gamma_{\mu}b_L)$ | C |
| VnueLR_2311 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{e}_R\gamma_{\mu}e_R)$ | C |
| VnueLR_2322 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\mu}_R\gamma_{\mu}\mu_R)$ | C |
| VnueLR_2333 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{\tau}_R\gamma_{\mu}\tau_R)$ | C |
| VnuuLR_2311 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{u}_R\gamma_{\mu}u_R)$ | C |
| VnuuLR_2322 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{c}_R\gamma_{\mu}c_R)$ | C |
| VnudLR_2311 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{d}_R\gamma_{\mu}d_R)$ | C |
| VnudLR_2322 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{s}_R\gamma_{\mu}s_R)$ | C |
| VnudLR_2333 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{b}_R\gamma_{\mu}b_R)$ | C |

**ubenu**

| WC name | Operator | Type |
|---|---|---|
| VnueduLL_1131 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_1131 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_1131 | $(\bar{\nu}_{L1}e_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_1131 | $(\bar{\nu}_{L1}e_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_1131 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}e_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_2131 | $(\bar{\nu}_{L2}\gamma^{\mu}e_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_2131 | $(\bar{\nu}_{L2}\gamma^{\mu}e_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_2131 | $(\bar{\nu}_{L2}e_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_2131 | $(\bar{\nu}_{L2}e_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_2131 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}e_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_3131 | $(\bar{\nu}_{L3}\gamma^{\mu}e_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_3131 | $(\bar{\nu}_{L3}\gamma^{\mu}e_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_3131 | $(\bar{\nu}_{L3}e_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_3131 | $(\bar{\nu}_{L3}e_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_3131 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}e_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |

**ubmunu**

| WC name | Operator | Type |
|---------|----------|------|
| VnueduLL_1231 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_1231 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_1231 | $(\bar{\nu}_{L1}\mu_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_1231 | $(\bar{\nu}_{L1}\mu_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_1231 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_2231 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_2231 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_2231 | $(\bar{\nu}_{L2}\mu_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_2231 | $(\bar{\nu}_{L2}\mu_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_2231 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_3231 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_3231 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_3231 | $(\bar{\nu}_{L3}\mu_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_3231 | $(\bar{\nu}_{L3}\mu_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_3231 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\mu_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |

**ubtaunu**

| WC name | Operator | Type |
|---------|----------|------|
| VnueduLL_1331 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_1331 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_1331 | $(\bar{\nu}_{L1}\tau_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_1331 | $(\bar{\nu}_{L1}\tau_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_1331 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_2331 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_2331 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_2331 | $(\bar{\nu}_{L2}\tau_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_2331 | $(\bar{\nu}_{L2}\tau_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_2331 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_3331 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{b}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_3331 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{b}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_3331 | $(\bar{\nu}_{L3}\tau_R)(\bar{b}_R u_L)$ | C |
| SnueduRR_3331 | $(\bar{\nu}_{L3}\tau_R)(\bar{b}_L u_R)$ | C |
| TnueduRR_3331 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\tau_R)(\bar{b}_L\sigma_{\mu\nu}u_R)$ | C |

**cbenu**

| WC name | Operator | Type |
|---------|----------|------|
| VnueduLL_1132 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{b}_L\gamma_{\mu}c_L)$ | C |

| WC name | Operator | Type |
|---|---|---|
| VnueduLR_1132 | $(\bar{\nu}_{L1}\gamma^{\mu}e_{L})(\bar{b}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_1132 | $(\bar{\nu}_{L1}e_{R})(\bar{b}_{R}c_{L})$ | C |
| SnueduRR_1132 | $(\bar{\nu}_{L1}e_{R})(\bar{b}_{L}c_{R})$ | C |
| TnueduRR_1132 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}e_{R})(\bar{b}_{L}\sigma_{\mu\nu}c_{R})$ | C |
| VnueduLL_2132 | $(\bar{\nu}_{L2}\gamma^{\mu}e_{L})(\bar{b}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_2132 | $(\bar{\nu}_{L2}\gamma^{\mu}e_{L})(\bar{b}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_2132 | $(\bar{\nu}_{L2}e_{R})(\bar{b}_{R}c_{L})$ | C |
| SnueduRR_2132 | $(\bar{\nu}_{L2}e_{R})(\bar{b}_{L}c_{R})$ | C |
| TnueduRR_2132 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}e_{R})(\bar{b}_{L}\sigma_{\mu\nu}c_{R})$ | C |
| VnueduLL_3132 | $(\bar{\nu}_{L3}\gamma^{\mu}e_{L})(\bar{b}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_3132 | $(\bar{\nu}_{L3}\gamma^{\mu}e_{L})(\bar{b}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_3132 | $(\bar{\nu}_{L3}e_{R})(\bar{b}_{R}c_{L})$ | C |
| SnueduRR_3132 | $(\bar{\nu}_{L3}e_{R})(\bar{b}_{L}c_{R})$ | C |
| TnueduRR_3132 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}e_{R})(\bar{b}_{L}\sigma_{\mu\nu}c_{R})$ | C |

**cbmunu**

| WC name | Operator | Type |
|---|---|---|
| VnueduLL_1232 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_{L})(\bar{b}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_1232 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_{L})(\bar{b}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_1232 | $(\bar{\nu}_{L1}\mu_{R})(\bar{b}_{R}c_{L})$ | C |
| SnueduRR_1232 | $(\bar{\nu}_{L1}\mu_{R})(\bar{b}_{L}c_{R})$ | C |
| TnueduRR_1232 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\mu_{R})(\bar{b}_{L}\sigma_{\mu\nu}c_{R})$ | C |
| VnueduLL_2232 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_{L})(\bar{b}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_2232 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_{L})(\bar{b}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_2232 | $(\bar{\nu}_{L2}\mu_{R})(\bar{b}_{R}c_{L})$ | C |
| SnueduRR_2232 | $(\bar{\nu}_{L2}\mu_{R})(\bar{b}_{L}c_{R})$ | C |
| TnueduRR_2232 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\mu_{R})(\bar{b}_{L}\sigma_{\mu\nu}c_{R})$ | C |
| VnueduLL_3232 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_{L})(\bar{b}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_3232 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_{L})(\bar{b}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_3232 | $(\bar{\nu}_{L3}\mu_{R})(\bar{b}_{R}c_{L})$ | C |
| SnueduRR_3232 | $(\bar{\nu}_{L3}\mu_{R})(\bar{b}_{L}c_{R})$ | C |
| TnueduRR_3232 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\mu_{R})(\bar{b}_{L}\sigma_{\mu\nu}c_{R})$ | C |

**cbtaunu**

| WC name | Operator | Type |
|---|---|---|
| VnueduLL_1332 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_{L})(\bar{b}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_1332 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_{L})(\bar{b}_{R}\gamma_{\mu}c_{R})$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| SnueduRL_1332 | $(\bar{\nu}_{L1}\tau_R)(\bar{b}_R c_L)$ | C |
| SnueduRR_1332 | $(\bar{\nu}_{L1}\tau_R)(\bar{b}_L c_R)$ | C |
| TnueduRR_1332 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\tau_R)(\bar{b}_L \sigma_{\mu\nu} c_R)$ | C |
| VnueduLL_2332 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{b}_L \gamma_{\mu} c_L)$ | C |
| VnueduLR_2332 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{b}_R \gamma_{\mu} c_R)$ | C |
| SnueduRL_2332 | $(\bar{\nu}_{L2}\tau_R)(\bar{b}_R c_L)$ | C |
| SnueduRR_2332 | $(\bar{\nu}_{L2}\tau_R)(\bar{b}_L c_R)$ | C |
| TnueduRR_2332 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\tau_R)(\bar{b}_L \sigma_{\mu\nu} c_R)$ | C |
| VnueduLL_3332 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{b}_L \gamma_{\mu} c_L)$ | C |
| VnueduLR_3332 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{b}_R \gamma_{\mu} c_R)$ | C |
| SnueduRL_3332 | $(\bar{\nu}_{L3}\tau_R)(\bar{b}_R c_L)$ | C |
| SnueduRR_3332 | $(\bar{\nu}_{L3}\tau_R)(\bar{b}_L c_R)$ | C |
| TnueduRR_3332 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\tau_R)(\bar{b}_L \sigma_{\mu\nu} c_R)$ | C |

**usenu**

| WC name | Operator | Type |
| --- | --- | --- |
| VnueduLL_1121 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{s}_L \gamma_{\mu} u_L)$ | C |
| VnueduLR_1121 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{s}_R \gamma_{\mu} u_R)$ | C |
| SnueduRL_1121 | $(\bar{\nu}_{L1}e_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_1121 | $(\bar{\nu}_{L1}e_R)(\bar{s}_L u_R)$ | C |
| TnueduRR_1121 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}e_R)(\bar{s}_L \sigma_{\mu\nu} u_R)$ | C |
| VnueduLL_2121 | $(\bar{\nu}_{L2}\gamma^{\mu}e_L)(\bar{s}_L \gamma_{\mu} u_L)$ | C |
| VnueduLR_2121 | $(\bar{\nu}_{L2}\gamma^{\mu}e_L)(\bar{s}_R \gamma_{\mu} u_R)$ | C |
| SnueduRL_2121 | $(\bar{\nu}_{L2}e_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_2121 | $(\bar{\nu}_{L2}e_R)(\bar{s}_L u_R)$ | C |
| TnueduRR_2121 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}e_R)(\bar{s}_L \sigma_{\mu\nu} u_R)$ | C |
| VnueduLL_3121 | $(\bar{\nu}_{L3}\gamma^{\mu}e_L)(\bar{s}_L \gamma_{\mu} u_L)$ | C |
| VnueduLR_3121 | $(\bar{\nu}_{L3}\gamma^{\mu}e_L)(\bar{s}_R \gamma_{\mu} u_R)$ | C |
| SnueduRL_3121 | $(\bar{\nu}_{L3}e_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_3121 | $(\bar{\nu}_{L3}e_R)(\bar{s}_L u_R)$ | C |
| TnueduRR_3121 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}e_R)(\bar{s}_L \sigma_{\mu\nu} u_R)$ | C |

**usmunu**

| WC name | Operator | Type |
| --- | --- | --- |
| VnueduLL_1221 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_L)(\bar{s}_L \gamma_{\mu} u_L)$ | C |
| VnueduLR_1221 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_L)(\bar{s}_R \gamma_{\mu} u_R)$ | C |
| SnueduRL_1221 | $(\bar{\nu}_{L1}\mu_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_1221 | $(\bar{\nu}_{L1}\mu_R)(\bar{s}_L u_R)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| TnueduRR_1221 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_2221 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_L)(\bar{s}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_2221 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_L)(\bar{s}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_2221 | $(\bar{\nu}_{L2}\mu_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_2221 | $(\bar{\nu}_{L2}\mu_R)(\bar{s}_L u_R)$ | C |
| TnueduRR_2221 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_3221 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_L)(\bar{s}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_3221 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_L)(\bar{s}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_3221 | $(\bar{\nu}_{L3}\mu_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_3221 | $(\bar{\nu}_{L3}\mu_R)(\bar{s}_L u_R)$ | C |
| TnueduRR_3221 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}u_R)$ | C |

**ustaunu**

| WC name | Operator | Type |
| --- | --- | --- |
| VnueduLL_1321 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_L)(\bar{s}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_1321 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_L)(\bar{s}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_1321 | $(\bar{\nu}_{L1}\tau_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_1321 | $(\bar{\nu}_{L1}\tau_R)(\bar{s}_L u_R)$ | C |
| TnueduRR_1321 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_2321 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{s}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_2321 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{s}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_2321 | $(\bar{\nu}_{L2}\tau_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_2321 | $(\bar{\nu}_{L2}\tau_R)(\bar{s}_L u_R)$ | C |
| TnueduRR_2321 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_3321 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{s}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_3321 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{s}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_3321 | $(\bar{\nu}_{L3}\tau_R)(\bar{s}_R u_L)$ | C |
| SnueduRR_3321 | $(\bar{\nu}_{L3}\tau_R)(\bar{s}_L u_R)$ | C |
| TnueduRR_3321 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}u_R)$ | C |

**csenu**

| WC name | Operator | Type |
| --- | --- | --- |
| VnueduLL_1122 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{s}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_1122 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{s}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_1122 | $(\bar{\nu}_{L1}e_R)(\bar{s}_R c_L)$ | C |
| SnueduRR_1122 | $(\bar{\nu}_{L1}e_R)(\bar{s}_L c_R)$ | C |
| TnueduRR_1122 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |
| VnueduLL_2122 | $(\bar{\nu}_{L2}\gamma^{\mu}e_L)(\bar{s}_L\gamma_{\mu}c_L)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| VnueduLR_2122 | $(\bar{\nu}_{L2}\gamma^{\mu}e_L)(\bar{s}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_2122 | $(\bar{\nu}_{L2}e_R)(\bar{s}_Rc_L)$ | C |
| SnueduRR_2122 | $(\bar{\nu}_{L2}e_R)(\bar{s}_Lc_R)$ | C |
| TnueduRR_2122 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |
| VnueduLL_3122 | $(\bar{\nu}_{L3}\gamma^{\mu}e_L)(\bar{s}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_3122 | $(\bar{\nu}_{L3}\gamma^{\mu}e_L)(\bar{s}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_3122 | $(\bar{\nu}_{L3}e_R)(\bar{s}_Rc_L)$ | C |
| SnueduRR_3122 | $(\bar{\nu}_{L3}e_R)(\bar{s}_Lc_R)$ | C |
| TnueduRR_3122 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}e_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |

**csmunu**

| WC name | Operator | Type |
|---------|----------|------|
| VnueduLL_1222 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_L)(\bar{s}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_1222 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_L)(\bar{s}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_1222 | $(\bar{\nu}_{L1}\mu_R)(\bar{s}_Rc_L)$ | C |
| SnueduRR_1222 | $(\bar{\nu}_{L1}\mu_R)(\bar{s}_Lc_R)$ | C |
| TnueduRR_1222 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |
| VnueduLL_2222 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_L)(\bar{s}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_2222 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_L)(\bar{s}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_2222 | $(\bar{\nu}_{L2}\mu_R)(\bar{s}_Rc_L)$ | C |
| SnueduRR_2222 | $(\bar{\nu}_{L2}\mu_R)(\bar{s}_Lc_R)$ | C |
| TnueduRR_2222 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |
| VnueduLL_3222 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_L)(\bar{s}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_3222 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_L)(\bar{s}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_3222 | $(\bar{\nu}_{L3}\mu_R)(\bar{s}_Rc_L)$ | C |
| SnueduRR_3222 | $(\bar{\nu}_{L3}\mu_R)(\bar{s}_Lc_R)$ | C |
| TnueduRR_3222 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\mu_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |

**cstaunu**

| WC name | Operator | Type |
|---------|----------|------|
| VnueduLL_1322 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_L)(\bar{s}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_1322 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_L)(\bar{s}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_1322 | $(\bar{\nu}_{L1}\tau_R)(\bar{s}_Rc_L)$ | C |
| SnueduRR_1322 | $(\bar{\nu}_{L1}\tau_R)(\bar{s}_Lc_R)$ | C |
| TnueduRR_1322 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |
| VnueduLL_2322 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{s}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_2322 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{s}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_2322 | $(\bar{\nu}_{L2}\tau_R)(\bar{s}_Rc_L)$ | C |

| WC name | Operator | Type |
| --- | --- | --- |
| SnueduRR_2322 | $(\bar{\nu}_{L2}\tau_R)(\bar{s}_L c_R)$ | C |
| TnueduRR_2322 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |
| VnueduLL_3322 | $(\bar{\nu}_{L3}\gamma^\mu\tau_L)(\bar{s}_L\gamma_\mu c_L)$ | C |
| VnueduLR_3322 | $(\bar{\nu}_{L3}\gamma^\mu\tau_L)(\bar{s}_R\gamma_\mu c_R)$ | C |
| SnueduRL_3322 | $(\bar{\nu}_{L3}\tau_R)(\bar{s}_R c_L)$ | C |
| SnueduRR_3322 | $(\bar{\nu}_{L3}\tau_R)(\bar{s}_L c_R)$ | C |
| TnueduRR_3322 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\tau_R)(\bar{s}_L\sigma_{\mu\nu}c_R)$ | C |

**udenu**

| WC name | Operator | Type |
| --- | --- | --- |
| VnueduLL_1111 | $(\bar{\nu}_{L1}\gamma^\mu e_L)(\bar{d}_L\gamma_\mu u_L)$ | C |
| VnueduLR_1111 | $(\bar{\nu}_{L1}\gamma^\mu e_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| SnueduRL_1111 | $(\bar{\nu}_{L1}e_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_1111 | $(\bar{\nu}_{L1}e_R)(\bar{d}_L u_R)$ | C |
| TnueduRR_1111 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_2111 | $(\bar{\nu}_{L2}\gamma^\mu e_L)(\bar{d}_L\gamma_\mu u_L)$ | C |
| VnueduLR_2111 | $(\bar{\nu}_{L2}\gamma^\mu e_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| SnueduRL_2111 | $(\bar{\nu}_{L2}e_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_2111 | $(\bar{\nu}_{L2}e_R)(\bar{d}_L u_R)$ | C |
| TnueduRR_2111 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_3111 | $(\bar{\nu}_{L3}\gamma^\mu e_L)(\bar{d}_L\gamma_\mu u_L)$ | C |
| VnueduLR_3111 | $(\bar{\nu}_{L3}\gamma^\mu e_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| SnueduRL_3111 | $(\bar{\nu}_{L3}e_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_3111 | $(\bar{\nu}_{L3}e_R)(\bar{d}_L u_R)$ | C |
| TnueduRR_3111 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |

**udmunu**

| WC name | Operator | Type |
| --- | --- | --- |
| VnueduLL_1211 | $(\bar{\nu}_{L1}\gamma^\mu\mu_L)(\bar{d}_L\gamma_\mu u_L)$ | C |
| VnueduLR_1211 | $(\bar{\nu}_{L1}\gamma^\mu\mu_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| SnueduRL_1211 | $(\bar{\nu}_{L1}\mu_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_1211 | $(\bar{\nu}_{L1}\mu_R)(\bar{d}_L u_R)$ | C |
| TnueduRR_1211 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\mu_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_2211 | $(\bar{\nu}_{L2}\gamma^\mu\mu_L)(\bar{d}_L\gamma_\mu u_L)$ | C |
| VnueduLR_2211 | $(\bar{\nu}_{L2}\gamma^\mu\mu_L)(\bar{d}_R\gamma_\mu u_R)$ | C |
| SnueduRL_2211 | $(\bar{\nu}_{L2}\mu_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_2211 | $(\bar{\nu}_{L2}\mu_R)(\bar{d}_L u_R)$ | C |

| WC name | Operator | Type |
|---------|----------|------|
| TnueduRR_2211 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\mu_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_3211 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_L)(\bar{d}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_3211 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_L)(\bar{d}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_3211 | $(\bar{\nu}_{L3}\mu_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_3211 | $(\bar{\nu}_{L3}\mu_R)(\bar{d}_L u_R)$ | C |
| TnueduRR_3211 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\mu_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |

**udtaunu**

| WC name | Operator | Type |
|---------|----------|------|
| VnueduLL_1311 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_L)(\bar{d}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_1311 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_L)(\bar{d}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_1311 | $(\bar{\nu}_{L1}\tau_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_1311 | $(\bar{\nu}_{L1}\tau_R)(\bar{d}_L u_R)$ | C |
| TnueduRR_1311 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\tau_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_2311 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{d}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_2311 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_L)(\bar{d}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_2311 | $(\bar{\nu}_{L2}\tau_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_2311 | $(\bar{\nu}_{L2}\tau_R)(\bar{d}_L u_R)$ | C |
| TnueduRR_2311 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\tau_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |
| VnueduLL_3311 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{d}_L\gamma_{\mu}u_L)$ | C |
| VnueduLR_3311 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{d}_R\gamma_{\mu}u_R)$ | C |
| SnueduRL_3311 | $(\bar{\nu}_{L3}\tau_R)(\bar{d}_R u_L)$ | C |
| SnueduRR_3311 | $(\bar{\nu}_{L3}\tau_R)(\bar{d}_L u_R)$ | C |
| TnueduRR_3311 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\tau_R)(\bar{d}_L\sigma_{\mu\nu}u_R)$ | C |

**cdenu**

| WC name | Operator | Type |
|---------|----------|------|
| VnueduLL_1112 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{d}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_1112 | $(\bar{\nu}_{L1}\gamma^{\mu}e_L)(\bar{d}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_1112 | $(\bar{\nu}_{L1}e_R)(\bar{d}_R c_L)$ | C |
| SnueduRR_1112 | $(\bar{\nu}_{L1}e_R)(\bar{d}_L c_R)$ | C |
| TnueduRR_1112 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}c_R)$ | C |
| VnueduLL_2112 | $(\bar{\nu}_{L2}\gamma^{\mu}e_L)(\bar{d}_L\gamma_{\mu}c_L)$ | C |
| VnueduLR_2112 | $(\bar{\nu}_{L2}\gamma^{\mu}e_L)(\bar{d}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_2112 | $(\bar{\nu}_{L2}e_R)(\bar{d}_R c_L)$ | C |
| SnueduRR_2112 | $(\bar{\nu}_{L2}e_R)(\bar{d}_L c_R)$ | C |
| TnueduRR_2112 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}e_R)(\bar{d}_L\sigma_{\mu\nu}c_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| VnueduLL_3112 | $(\bar{\nu}_{L3}\gamma^{\mu}e_{L})(\bar{d}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_3112 | $(\bar{\nu}_{L3}\gamma^{\mu}e_{L})(\bar{d}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_3112 | $(\bar{\nu}_{L3}e_{R})(\bar{d}_{R}c_{L})$ | C |
| SnueduRR_3112 | $(\bar{\nu}_{L3}e_{R})(\bar{d}_{L}c_{R})$ | C |
| TnueduRR_3112 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}e_{R})(\bar{d}_{L}\sigma_{\mu\nu}c_{R})$ | C |

**cdmunu**

| WC name | Operator | Type |
|---|---|---|
| VnueduLL_1212 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_{L})(\bar{d}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_1212 | $(\bar{\nu}_{L1}\gamma^{\mu}\mu_{L})(\bar{d}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_1212 | $(\bar{\nu}_{L1}\mu_{R})(\bar{d}_{R}c_{L})$ | C |
| SnueduRR_1212 | $(\bar{\nu}_{L1}\mu_{R})(\bar{d}_{L}c_{R})$ | C |
| TnueduRR_1212 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\mu_{R})(\bar{d}_{L}\sigma_{\mu\nu}c_{R})$ | C |
| VnueduLL_2212 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_{L})(\bar{d}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_2212 | $(\bar{\nu}_{L2}\gamma^{\mu}\mu_{L})(\bar{d}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_2212 | $(\bar{\nu}_{L2}\mu_{R})(\bar{d}_{R}c_{L})$ | C |
| SnueduRR_2212 | $(\bar{\nu}_{L2}\mu_{R})(\bar{d}_{L}c_{R})$ | C |
| TnueduRR_2212 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\mu_{R})(\bar{d}_{L}\sigma_{\mu\nu}c_{R})$ | C |
| VnueduLL_3212 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_{L})(\bar{d}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_3212 | $(\bar{\nu}_{L3}\gamma^{\mu}\mu_{L})(\bar{d}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_3212 | $(\bar{\nu}_{L3}\mu_{R})(\bar{d}_{R}c_{L})$ | C |
| SnueduRR_3212 | $(\bar{\nu}_{L3}\mu_{R})(\bar{d}_{L}c_{R})$ | C |
| TnueduRR_3212 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\mu_{R})(\bar{d}_{L}\sigma_{\mu\nu}c_{R})$ | C |

**cdtaunu**

| WC name | Operator | Type |
|---|---|---|
| VnueduLL_1312 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_{L})(\bar{d}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_1312 | $(\bar{\nu}_{L1}\gamma^{\mu}\tau_{L})(\bar{d}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_1312 | $(\bar{\nu}_{L1}\tau_{R})(\bar{d}_{R}c_{L})$ | C |
| SnueduRR_1312 | $(\bar{\nu}_{L1}\tau_{R})(\bar{d}_{L}c_{R})$ | C |
| TnueduRR_1312 | $(\bar{\nu}_{L1}\sigma^{\mu\nu}\tau_{R})(\bar{d}_{L}\sigma_{\mu\nu}c_{R})$ | C |
| VnueduLL_2312 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_{L})(\bar{d}_{L}\gamma_{\mu}c_{L})$ | C |
| VnueduLR_2312 | $(\bar{\nu}_{L2}\gamma^{\mu}\tau_{L})(\bar{d}_{R}\gamma_{\mu}c_{R})$ | C |
| SnueduRL_2312 | $(\bar{\nu}_{L2}\tau_{R})(\bar{d}_{R}c_{L})$ | C |
| SnueduRR_2312 | $(\bar{\nu}_{L2}\tau_{R})(\bar{d}_{L}c_{R})$ | C |
| TnueduRR_2312 | $(\bar{\nu}_{L2}\sigma^{\mu\nu}\tau_{R})(\bar{d}_{L}\sigma_{\mu\nu}c_{R})$ | C |
| VnueduLL_3312 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_{L})(\bar{d}_{L}\gamma_{\mu}c_{L})$ | C |

| WC name | Operator | Type |
|---|---|---|
| VnueduLR_3312 | $(\bar{\nu}_{L3}\gamma^{\mu}\tau_L)(\bar{d}_R\gamma_{\mu}c_R)$ | C |
| SnueduRL_3312 | $(\bar{\nu}_{L3}\tau_R)(\bar{d}_R c_L)$ | C |
| SnueduRR_3312 | $(\bar{\nu}_{L3}\tau_R)(\bar{d}_L c_R)$ | C |
| TnueduRR_3312 | $(\bar{\nu}_{L3}\sigma^{\mu\nu}\tau_R)(\bar{d}_L\sigma_{\mu\nu}c_R)$ | C |

**sbnunu**

| WC name | Operator | Type |
|---|---|---|
| VnudLL_1123 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{s}_L\gamma_{\mu}b_L)$ | C |
| VnudLL_2223 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{s}_L\gamma_{\mu}b_L)$ | C |
| VnudLL_3323 | $(\bar{\nu}_{L3}\gamma^{\mu}\nu_{L3})(\bar{s}_L\gamma_{\mu}b_L)$ | C |
| VnudLR_1123 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{s}_R\gamma_{\mu}b_R)$ | C |
| VnudLR_2223 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{s}_R\gamma_{\mu}b_R)$ | C |
| VnudLR_3323 | $(\bar{\nu}_{L3}\gamma^{\mu}\nu_{L3})(\bar{s}_R\gamma_{\mu}b_R)$ | C |
| VnudLL_1232 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{b}_L\gamma_{\mu}s_L)$ | C |
| VnudLR_1232 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{b}_R\gamma_{\mu}s_R)$ | C |
| VnudLL_1332 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{b}_L\gamma_{\mu}s_L)$ | C |
| VnudLR_1332 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{b}_R\gamma_{\mu}s_R)$ | C |
| VnudLL_1223 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{s}_L\gamma_{\mu}b_L)$ | C |
| VnudLR_1223 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{s}_R\gamma_{\mu}b_R)$ | C |
| VnudLL_2332 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{b}_L\gamma_{\mu}s_L)$ | C |
| VnudLR_2332 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{b}_R\gamma_{\mu}s_R)$ | C |
| VnudLL_1323 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{s}_L\gamma_{\mu}b_L)$ | C |
| VnudLR_1323 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{s}_R\gamma_{\mu}b_R)$ | C |
| VnudLL_2323 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{s}_L\gamma_{\mu}b_L)$ | C |
| VnudLR_2323 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{s}_R\gamma_{\mu}b_R)$ | C |

**dbnunu**

| WC name | Operator | Type |
|---|---|---|
| VnudLL_1113 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{d}_L\gamma_{\mu}b_L)$ | C |
| VnudLL_2213 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{d}_L\gamma_{\mu}b_L)$ | C |
| VnudLL_3313 | $(\bar{\nu}_{L3}\gamma^{\mu}\nu_{L3})(\bar{d}_L\gamma_{\mu}b_L)$ | C |
| VnudLR_1113 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{d}_R\gamma_{\mu}b_R)$ | C |
| VnudLR_2213 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{d}_R\gamma_{\mu}b_R)$ | C |
| VnudLR_3313 | $(\bar{\nu}_{L3}\gamma^{\mu}\nu_{L3})(\bar{d}_R\gamma_{\mu}b_R)$ | C |
| VnudLL_1231 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{b}_L\gamma_{\mu}d_L)$ | C |
| VnudLR_1231 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{b}_R\gamma_{\mu}d_R)$ | C |
| VnudLL_1331 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{b}_L\gamma_{\mu}d_L)$ | C |
| VnudLR_1331 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{b}_R\gamma_{\mu}d_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| VnudLL_1213 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{d}_L\gamma_{\mu}b_L)$ | C |
| VnudLR_1213 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{d}_R\gamma_{\mu}b_R)$ | C |
| VnudLL_2331 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{b}_L\gamma_{\mu}d_L)$ | C |
| VnudLR_2331 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{b}_R\gamma_{\mu}d_R)$ | C |
| VnudLL_1313 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{d}_L\gamma_{\mu}b_L)$ | C |
| VnudLR_1313 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{d}_R\gamma_{\mu}b_R)$ | C |
| VnudLL_2313 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{d}_L\gamma_{\mu}b_L)$ | C |
| VnudLR_2313 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{d}_R\gamma_{\mu}b_R)$ | C |

**sdnunu**

| WC name | Operator | Type |
|---|---|---|
| VnudLL_1112 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{d}_L\gamma_{\mu}s_L)$ | C |
| VnudLL_2212 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{d}_L\gamma_{\mu}s_L)$ | C |
| VnudLL_3312 | $(\bar{\nu}_{L3}\gamma^{\mu}\nu_{L3})(\bar{d}_L\gamma_{\mu}s_L)$ | C |
| VnudLR_1112 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VnudLR_2212 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VnudLR_3312 | $(\bar{\nu}_{L3}\gamma^{\mu}\nu_{L3})(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VnudLL_1221 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{s}_L\gamma_{\mu}d_L)$ | C |
| VnudLR_1221 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{s}_R\gamma_{\mu}d_R)$ | C |
| VnudLL_1321 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{s}_L\gamma_{\mu}d_L)$ | C |
| VnudLR_1321 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{s}_R\gamma_{\mu}d_R)$ | C |
| VnudLL_1212 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{d}_L\gamma_{\mu}s_L)$ | C |
| VnudLR_1212 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VnudLL_2321 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{s}_L\gamma_{\mu}d_L)$ | C |
| VnudLR_2321 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{s}_R\gamma_{\mu}d_R)$ | C |
| VnudLL_1312 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{d}_L\gamma_{\mu}s_L)$ | C |
| VnudLR_1312 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{d}_R\gamma_{\mu}s_R)$ | C |
| VnudLL_2312 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{d}_L\gamma_{\mu}s_L)$ | C |
| VnudLR_2312 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{d}_R\gamma_{\mu}s_R)$ | C |

**cununu**

| WC name | Operator | Type |
|---|---|---|
| VnuuLL_1112 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{u}_L\gamma_{\mu}c_L)$ | C |
| VnuuLL_2212 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{u}_L\gamma_{\mu}c_L)$ | C |
| VnuuLL_3312 | $(\bar{\nu}_{L3}\gamma^{\mu}\nu_{L3})(\bar{u}_L\gamma_{\mu}c_L)$ | C |
| VnuuLR_1112 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L1})(\bar{u}_R\gamma_{\mu}c_R)$ | C |
| VnuuLR_2212 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L2})(\bar{u}_R\gamma_{\mu}c_R)$ | C |
| VnuuLR_3312 | $(\bar{\nu}_{L3}\gamma^{\mu}\nu_{L3})(\bar{u}_R\gamma_{\mu}c_R)$ | C |

| WC name | Operator | Type |
|---|---|---|
| VnuuLL_1221 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{c}_L\gamma_{\mu}u_L)$ | C |
| VnuuLR_1221 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{c}_R\gamma_{\mu}u_R)$ | C |
| VnuuLL_1321 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{c}_L\gamma_{\mu}u_L)$ | C |
| VnuuLR_1321 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{c}_R\gamma_{\mu}u_R)$ | C |
| VnuuLL_1212 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{u}_L\gamma_{\mu}c_L)$ | C |
| VnuuLR_1212 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L2})(\bar{u}_R\gamma_{\mu}c_R)$ | C |
| VnuuLL_2321 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{c}_L\gamma_{\mu}u_L)$ | C |
| VnuuLR_2321 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{c}_R\gamma_{\mu}u_R)$ | C |
| VnuuLL_1312 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{u}_L\gamma_{\mu}c_L)$ | C |
| VnuuLR_1312 | $(\bar{\nu}_{L1}\gamma^{\mu}\nu_{L3})(\bar{u}_R\gamma_{\mu}c_R)$ | C |
| VnuuLL_2312 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{u}_L\gamma_{\mu}c_L)$ | C |
| VnuuLR_2312 | $(\bar{\nu}_{L2}\gamma^{\mu}\nu_{L3})(\bar{u}_R\gamma_{\mu}c_R)$ | C |