# Basis Bern (EFT WET-4)

# Sectors

The effective Lagrangian is defined as

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

#### udenu

WC name	Operator	Type
1udee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{e}\gamma_\mu\nu_e)$	C
5udee	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{u} P_R d) (\bar{e} \nu_e)$	$\mathbf{C}$
1pudee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_e)$	$\mathbf{C}$
5pudee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{e}\nu_e)$	$^{\mathrm{C}}$
7pudee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_e)$	$\mathbf{C}$
1udemu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{e}\gamma_\mu  u_\mu)$	$^{\mathrm{C}}$
5udemu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{e}\nu_\mu)$	$^{\mathrm{C}}$
1pudemu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5pudemu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{e}\nu_\mu)$	$^{\mathrm{C}}$
7pudemu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_{\mu})$	$\mathbf{C}$
1udetau	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{e}\gamma_\mu \nu_ au)$	$\mathbf{C}$
5udetau	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{e}\nu_{\tau})$	$\mathbf{C}$
1pudetau	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_ au)$	$^{\mathrm{C}}$
5pudetau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{e}\nu_{\tau})$	$^{\mathrm{C}}$
7pudetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_\tau)$	$^{\mathrm{C}}$

#### udmunu

WC name	Operator	Type
1udmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_e)$	С
5udmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{\mu}\nu_e)$	$^{\mathrm{C}}$
1pudmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_e)$	$\mathbf{C}$
5pudmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\mu}\nu_e)$	$\mathbf{C}$
7pudmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\mu}\sigma_{\mu\nu}\nu_e)$	$\mathbf{C}$
1udmumu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5udmumu	$\begin{split} &\frac{4G_{F}}{\sqrt{2}}(\bar{u}P_{R}\gamma^{\mu}d)(\bar{\mu}\gamma_{\mu}\nu_{e}) \\ &\frac{4G_{F}}{\sqrt{2}}(\bar{u}P_{R}d)(\bar{\mu}\nu_{e}) \\ &\frac{4G_{F}}{\sqrt{2}}(\bar{u}P_{L}\gamma^{\mu}d)(\bar{\mu}\gamma_{\mu}\nu_{e}) \\ &\frac{4G_{F}}{\sqrt{2}}(\bar{u}P_{L}d)(\bar{\mu}\nu_{e}) \\ &\frac{4G_{F}}{\sqrt{2}}(\bar{u}P_{L}d)(\bar{\mu}\nu_{e}) \\ &\frac{4G_{F}}{\sqrt{2}}(\bar{u}P_{L}\sigma^{\mu\nu}d)(\bar{\mu}\sigma_{\mu\nu}\nu_{e}) \\ &\frac{4G_{F}}{\sqrt{2}}(\bar{u}P_{R}\gamma^{\mu}d)(\bar{\mu}\gamma_{\mu}\nu_{\mu}) \\ &\frac{4G_{F}}{\sqrt{2}}(\bar{u}P_{R}d)(\bar{\mu}\nu_{\mu}) \end{split}$	$^{\mathrm{C}}$

WC name	Operator	Type
1pudmumu	$ \frac{\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^{\mu}d)(\bar{\mu}\gamma_{\mu}\nu_{\mu})}{\frac{4G_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\mu}\nu_{\mu})} $ $ \frac{\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\mu}\sigma_{\mu\nu}\nu_{\mu})}{\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}d)(\bar{\mu}\gamma_{\mu}\nu_{\tau})} $	$\overline{C}$
5pudmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\mu}\nu_{\mu})$	$^{\mathrm{C}}$
7pudmumu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\mu}\sigma_{\mu\nu}\nu_{\mu})$	$^{\mathrm{C}}$
1udmutau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{\mu}\gamma_\mu  u_ au)$	$^{\mathrm{C}}$
5udmutau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{\mu}\nu_{\tau})$	$\mathbf{C}$
1pudmutau	$rac{4 \overset{\sim}{G_F}}{\sqrt{2}} (ar{u} P_R d) (ar{\mu}  u_ au) \ rac{4 \overset{\sim}{G_F}}{\sqrt{2}} (ar{u} P_L \gamma^\mu d) (ar{\mu} \gamma_\mu  u_ au)$	$^{\mathrm{C}}$
5pudmutau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\mu}\nu_{ au})$	$^{\mathrm{C}}$
7pudmutau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\mu}\nu_{\tau})$ $\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\mu}\sigma_{\mu\nu}\nu_{\tau})$	$^{\mathrm{C}}$

# udtaunu

WC name	Operator	Type
1udtaue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_e)$	C
5udtaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{\tau}\nu_e)$	$\mathbf{C}$
1pudtaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_e)$	$\mathbf{C}$
5pudtaue	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\tau}\nu_e)$	$^{\mathrm{C}}$
7pudtaue	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\tau}\sigma_{\mu\nu}\nu_e)$	$\mathbf{C}$
1udtaumu	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_\mu)$	$^{\mathrm{C}}$
5udtaumu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{\tau}\nu_\mu)$	$\mathbf{C}$
1pudtaumu	$\frac{4 \tilde{G}_F}{\sqrt{2}} (\bar{u} P_L \gamma^\mu d) (\bar{\tau} \gamma_\mu \nu_\mu)$	$\mathbf{C}$
5pudtaumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\tau} u_\mu)$	$\mathbf{C}$
7pudtaumu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\tau}\sigma_{\mu\nu}\nu_{\mu})$	$^{\mathrm{C}}$
1udtautau	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_ au)$	$^{\mathrm{C}}$
5udtautau	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Rd)(\bar{\tau}\nu_{\tau})$	$^{\mathrm{C}}$
1pudtautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_ au)$	$\mathbf{C}$
5pudtautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Ld)(\bar{\tau}\nu_{\tau})$	$\mathbf{C}$
7pudtautau	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}d)(\bar{\tau}\sigma_{\mu\nu}\nu_{\tau})$	$^{\mathrm{C}}$

# cdenu

WC name	Operator	Type
1cdee	$\begin{array}{l} \frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu d)(\bar{e}\gamma_\mu\nu_e) \\ \frac{4G_F}{\sqrt{2}}(\bar{c}P_R d)(\bar{e}\nu_e) \\ \frac{4G_F}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_e) \\ \frac{4G_F}{\sqrt{2}}(\bar{c}P_L d)(\bar{e}\nu_e) \end{array}$	C
5cdee	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_Rd)(\bar{e}\nu_e)$	$\mathbf{C}$
1pcdee	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_e)$	$\mathbf{C}$
5pcdee	$\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{c}P_Ld)(\bar{e} u_e)$	$\mathbf{C}$

WC name	Operator	Type
7pcdee	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_e)$	C
1cdemu	$\frac{4Q_F^2}{\sqrt{2}}(\bar{c}P_R\gamma^\mu d)(\bar{e}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5cdemu	$\frac{4G_F^2}{\sqrt{2}}(\bar{c}P_Rd)(\bar{e}\nu_\mu)$	$\mathbf{C}$
1pcdemu	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5pcdemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Ld)(\bar{e}\nu_\mu)$	$\mathbf{C}$
7pcdemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_{\mu})$	$\mathbf{C}$
1cdetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu d)(\bar{e}\gamma_\mu \nu_ au)$	$\mathbf{C}$
5cdetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Rd)(\bar{e}\nu_{\tau})$	$\mathbf{C}$
1pcdetau	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{e}\gamma_\mu\nu_ au)$	$\mathbf{C}$
5pcdetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Ld)(\bar{e}\nu_{\tau})$	$\mathbf{C}$
7pcdetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}d)(\bar{e}\sigma_{\mu\nu}\nu_\tau)$	С

# cdmunu

WC name	Operator	Type
1cdmue	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_e)$	C
5cdmue	$\frac{4\ddot{Q}_F}{\sqrt{2}}(\bar{c}P_Rd)(\bar{\mu}\nu_e)$	$\mathbf{C}$
1pcdmue	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_e)$	$\mathbf{C}$
5pcdmue	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{c} P_L d) (\bar{\mu} \nu_e)$	$\mathbf{C}$
7pcdmue	$\frac{4 \overset{\circ}{Q_F}}{\sqrt{2}} (\bar{c} P_L \sigma^{\mu\nu} d) (\bar{\mu} \sigma_{\mu\nu} \nu_e)$	$^{\mathrm{C}}$
1cdmumu	$\frac{4 \overset{\leftarrow}{G_F}}{\sqrt{2}} (\bar{c} P_R \gamma^{\mu} d) (\bar{\mu} \gamma_{\mu} \nu_{\mu})$	$\mathbf{C}$
5cdmumu	$\frac{4 \overset{\leftarrow}{G_F}}{\sqrt{2}} (\bar{c} P_R d) (\bar{\mu} \nu_{\mu})$	$\mathbf{C}$
1pcdmumu	$\frac{4 \overset{\leftarrow}{G_F}}{\sqrt{2}} (\bar{c} P_L \gamma^\mu d) (\bar{\mu} \gamma_\mu \nu_\mu)$	$\mathbf{C}$
5pcdmumu	$\frac{4 \overset{\leftarrow}{G_F}}{\sqrt{2}} (\bar{c} P_L d) (\bar{\mu} \nu_{\mu})$	$^{\mathrm{C}}$
7pcdmumu	$\frac{4 \overset{\leftarrow}{G_F}}{\sqrt{2}} (\bar{c} P_L \sigma^{\mu\nu} d) (\bar{\mu} \sigma_{\mu\nu} \nu_{\mu})$	$^{\mathrm{C}}$
1cdmutau	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{c} P_R \gamma^\mu d) (\bar{\mu} \gamma_\mu \nu_\tau)$	$\mathbf{C}$
5cdmutau	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{c} P_R d) (\bar{\mu} \nu_{\tau})$	$\mathbf{C}$
1pcdmutau	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{\mu}\gamma_\mu\nu_ au)$	$\mathbf{C}$
5pcdmutau	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{c}P_Ld)(\bar{\mu}\nu_{\tau})$	$^{\mathrm{C}}$
7pcdmutau	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}d)(\bar{\mu}\sigma_{\mu\nu}\nu_{ au})$	$\mathbf{C}$

#### cdtaunu

WC name	Operator	Type
1cdtaue	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_e)$	С

WC name	Operator	Type
5cdtaue	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_Rd)(\bar{\tau}\nu_e)$	C
1pcdtaue	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_e)$	$\mathbf{C}$
5pcdtaue	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_Ld)(\bar{\tau}\nu_e)$	$\mathbf{C}$
7pcdtaue	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}d)(\bar{\tau}\sigma_{\mu\nu}\nu_e)$	$\mathbf{C}$
1cdtaumu	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu d)(\bar{\tau}\gamma_\mu u_\mu)$	$^{\mathrm{C}}$
5cdtaumu	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_Rd)(\bar{ au} u_\mu)$	$\mathbf{C}$
1pcdtaumu	$\frac{4\widetilde{G_F}}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5pcdtaumu	$\frac{4\widetilde{G_F}}{\sqrt{2}}(\bar{c}P_Ld)(\bar{\tau} u_\mu)$	$\mathbf{C}$
7pcdtaumu	$\frac{4\widetilde{G_F}}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}d)(\bar{\tau}\sigma_{\mu\nu}\nu_{\mu})$	$\mathbf{C}$
1cdtautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu d)(\bar{\tau}\gamma_\mu\nu_ au)$	$\mathbf{C}$
5cdtautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Rd)(\bar{\tau}\nu_{\tau})$	$\mathbf{C}$
1pcdtautau	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_L\gamma^\mu d)(\bar{\tau}\gamma_\mu  u_ au)$	$^{\mathrm{C}}$
5pcdtautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Ld)(\bar{\tau}\nu_{ au})$	$^{\mathrm{C}}$
7pcdtautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}d)(\bar{\tau}\sigma_{\mu\nu}\nu_{\tau})$	C

#### sdsd

WC name	Operator	Type
1dsds	$\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_\mu P_L s)(\bar{d}\gamma^\mu P_L s)$	C
5dsds	$rac{4 ar{G_F}}{\sqrt{2}} (ar{d}_lpha P_L s_eta) (ar{d}_eta P_R s_lpha)$	$\mathbf{C}$
2dsds	$\frac{\frac{4\dot{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{d}P_Ls)}{\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu}P_Rs)(\bar{d}\gamma^{\mu}P_Rs)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}_{\alpha}P_Ls_{\beta})(\bar{d}_{\beta}P_Ls_{\alpha})}{\frac{4G_F}{\sqrt{2}}(\bar{d}_{\alpha}P_Ls_{\beta})(\bar{d}_{\beta}P_Ls_{\alpha})}$	$\mathbf{C}$
1pdsds	$\frac{4G_F}{\sqrt{2}}(ar{d}\gamma_\mu P_R s)(ar{d}\gamma^\mu P_R s)$	$\mathbf{C}$
3dsds	$\frac{4G_F}{\sqrt{2}}(ar{d}_{lpha}P_Ls_{eta})(ar{d}_{eta}P_Ls_{lpha})$	$\mathbf{C}$
2pdsds	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{d}P_Rs)$	$^{\mathrm{C}}$
4dsds	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{d}P_Rs)$	$\mathbf{C}$
3pdsds	$\frac{4\ddot{G}_F}{\sqrt{2}}(ar{d}_{lpha}P_Rs_{eta})(ar{d}_{eta}P_Rs_{lpha})$	C

# usenu

WC name	Operator	Type
1usee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_e)$ $\frac{4G_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{e}\nu_e)$ $\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_e)$ $\frac{4G_F}{\sqrt{2}}(\bar{u}P_Ls)(\bar{e}\nu_e)$	С
5usee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{e}\nu_e)$	$\mathbf{C}$
1pusee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_e)$	$\mathbf{C}$
5pusee	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Ls)(\bar{e}\nu_e)$	$\mathbf{C}$
7pusee	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\nu_e)$	$\mathbf{C}$

WC name	Operator	Type
1usemu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu s)(\bar{e}\gamma_\mu\nu_\mu)$	С
5usemu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{e}\nu_\mu)$	$^{\mathrm{C}}$
1pusemu	$rac{4G_F}{\sqrt{2}}(ar{u}P_L\gamma^\mu s)(ar{e}\gamma_\mu u_\mu) \ rac{4G_F}{\sqrt{2}}(ar{u}P_L s)(ar{e} u_\mu)$	$\mathbf{C}$
5pusemu	$\frac{4\breve{G}_F}{\sqrt{2}}(\bar{u}P_Ls)(\bar{e}\nu_\mu)$	$\mathbf{C}$
7pusemu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\nu_{\mu})$	$\mathbf{C}$
1usetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu s)(\bar{e}\gamma_\mu  u_ au)$	$\mathbf{C}$
5usetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{e} u_{ au})$	$\mathbf{C}$
1pusetau	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{u} P_L \gamma^\mu s) (\bar{e} \gamma_\mu \nu_ au)$	$\mathbf{C}$
5pusetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Ls)(\bar{e} u_{ au})$	$^{\mathrm{C}}$
7pusetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\nu_{\tau})$	С

# usmunu

WC name	Operator	Type
1usmue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}s)(\bar{\mu}\gamma_{\mu}\nu_e)$	$\overline{C}$
5usmue	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{u}P_Rs)(\bar{\mu}\nu_e)$	$\mathbf{C}$
1pusmue	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{u}P_L\gamma^\mu s)(\bar{\mu}\gamma_\mu\nu_e)$	$\mathbf{C}$
5pusmue	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{u}P_L s)(\bar{\mu}\nu_e)$	$\mathbf{C}$
7pusmue	$\frac{4 \overleftarrow{G_F}}{\sqrt{2}} (\bar{u} P_L \sigma^{\mu\nu} s) (\bar{\mu} \sigma_{\mu\nu} \nu_e)$	$\mathbf{C}$
1usmumu	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{u}P_R\gamma^\mu s)(\bar{\mu}\gamma_\mu \nu_\mu)$	$\mathbf{C}$
5usmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{\mu}\nu_{\mu})$	$\mathbf{C}$
1pusmumu	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{u}P_L\gamma^\mu s)(\bar{\mu}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5pusmumu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_Ls)(\bar{\mu}\nu_{\mu})$	$\mathbf{C}$
7pusmumu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\nu_{\mu})$	$\mathbf{C}$
1usmutau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu s)(\bar{\mu}\gamma_\mu\nu_ au)$	$\mathbf{C}$
5usmutau	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{\mu}\nu_{\tau})$	$\mathbf{C}$
1pusmutau	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{u}P_L\gamma^\mu s)(\bar{\mu}\gamma_\mu\nu_ au)$	$\mathbf{C}$
5pusmutau	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{u}P_L s)(\bar{\mu}\nu_{\tau})$	$\mathbf{C}$
7pusmutau	$\frac{4\overleftarrow{G_F}}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\nu_{ au})$	$^{\mathrm{C}}$

#### ${\tt ustaunu}$

WC name	Operator	Type
1ustaue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}s)(\bar{\tau}\gamma_{\mu}\nu_e)$	С
5ustaue	$\frac{4\ddot{G}_F^2}{\sqrt{2}}(\bar{u}P_Rs)(\bar{ au} u_e)$	$\mathbf{C}$

WC name	Operator	Type
1pustaue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\gamma^{\mu}s)(\bar{\tau}\gamma_{\mu}\nu_e)$	С
5pustaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Ls)(\bar{\tau}\nu_e)$	$\mathbf{C}$
7pustaue	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\nu_e)$	$\mathbf{C}$
1ustaumu	$\frac{4G_F}{\sqrt{2}}(\bar{u}P_R\gamma^\mu s)(\bar{\tau}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5ustaumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{\tau}\nu_\mu)$	$\mathbf{C}$
1pustaumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu s)(\bar{\tau}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5pustaumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Ls)(\bar{\tau}\nu_{\mu})$	$\mathbf{C}$
7pustaumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\nu_{\mu})$	$\mathbf{C}$
1ustautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_R\gamma^{\mu}s)(\bar{\tau}\gamma_{\mu}\nu_{\tau})$	$\mathbf{C}$
5ustautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}P_Rs)(\bar{\tau}\nu_{\tau})$	$\mathbf{C}$
1pustautau	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}P_L\gamma^\mu s)(\bar{\tau}\gamma_\mu\nu_ au)$	$\mathbf{C}$
5pustautau	$\frac{4\ddot{Q}_F}{\sqrt{2}}(\bar{u}P_Ls)(\bar{\tau}\nu_{ au})$	$\mathbf{C}$
7pustautau	$\frac{4G_F^c}{\sqrt{2}}(\bar{u}P_L\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\nu_{ au})$	$\mathbf{C}$

#### csenu

WC name	Operator	Type
1csee	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_e)$	C
5csee	$\frac{4\overset{\circ}{Q_F}}{\sqrt{2}}(\bar{c}P_Rs)(\bar{e}\nu_e)$	$\mathbf{C}$
1pcsee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_L\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_e)$	$\mathbf{C}$
5pcsee	$\frac{4\overset{\circ}{G_F}}{\sqrt{2}}(\bar{c}P_Ls)(\bar{e}\nu_e)$	$\mathbf{C}$
7pcsee	$\frac{4 \overset{\sim}{G_F}}{\sqrt{2}} (\bar{c} P_L \sigma^{\mu \nu} s) (\bar{e} \sigma_{\mu \nu} \nu_e)$	$\mathbf{C}$
1csemu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_{\mu})$	$^{\mathrm{C}}$
5csemu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_Rs)(\bar{e}\nu_\mu)$	$^{\mathrm{C}}$
1pcsemu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_{\mu})$	$^{\mathrm{C}}$
5pcsemu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L s)(\bar{e}\nu_\mu)$	$^{\mathrm{C}}$
7pcsemu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\nu_{\mu})$	$^{\mathrm{C}}$
1csetau	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_{\tau})$	$^{\mathrm{C}}$
5csetau	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_Rs)(\bar{e}\nu_{\tau})$	$^{\mathrm{C}}$
1pcsetau	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\gamma^{\mu}s)(\bar{e}\gamma_{\mu}\nu_{\tau})$	$^{\mathrm{C}}$
5pcsetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Ls)(\bar{e} u_{ au})$	$\mathbf{C}$
7pcsetau	$rac{4ar{G}_F}{\sqrt{2}}(ar{c}P_L\sigma^{\mu u}s)(ar{e}\sigma_{\mu u} u_ au)$	$\mathbf{C}$

#### csmunu

WC name	Operator	Type
1csmue	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^{\mu}s)(\bar{\mu}\gamma_{\mu}\nu_e)$	C
5csmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Rs)(\bar{\mu}\nu_e)$	$\mathbf{C}$
1pcsmue	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{c}P_L\gamma^\mu s)(\bar{\mu}\gamma_\mu\nu_e)$	$\mathbf{C}$
5pcsmue	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_Ls)(\bar{\mu}\nu_e)$	$\mathbf{C}$
7pcsmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\nu_e)$	$\mathbf{C}$
1csmumu	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu s)(\bar{\mu}\gamma_\mu  u_\mu)$	$\mathbf{C}$
5csmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Rs)(\bar{\mu}\nu_{\mu})$	$\mathbf{C}$
1pcsmumu	$\frac{4\widetilde{G}_F}{\sqrt{2}}(ar{c}P_L\gamma^\mu s)(ar{\mu}\gamma_\mu u_\mu)$	$\mathbf{C}$
5pcsmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Ls)(\bar{\mu}\nu_{\mu})$	$\mathbf{C}$
7pcsmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\nu_{\mu})$	$\mathbf{C}$
1csmutau	$\frac{4\widetilde{G}_F^c}{\sqrt{2}}(\bar{c}P_R\gamma^\mu s)(\bar{\mu}\gamma_\mu  u_ au)$	$\mathbf{C}$
5csmutau	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_Rs)(\bar{\mu}\nu_{\tau})$	$\mathbf{C}$
1pcsmutau	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(ar{c}P_L\gamma^\mu s)(ar{\mu}\gamma_\mu u_ au)$	$\mathbf{C}$
5pcsmutau	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}P_Ls)(\bar{\mu}\nu_{ au})$	$\mathbf{C}$
7pcsmutau	$\frac{4G_F^2}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\nu_\tau)$	C

# ${\tt cstaunu}$

WC name	Operator	Type
1cstaue	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^{\mu}s)(\bar{\tau}\gamma_{\mu}\nu_e)$	$\overline{C}$
5cstaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Rs)(\bar{\tau}\nu_e)$	$\mathbf{C}$
1pcstaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_L\gamma^\mu s)(\bar{\tau}\gamma_\mu \nu_e)$	$\mathbf{C}$
5pcstaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Ls)(\bar{\tau}\nu_e)$	$\mathbf{C}$
7pcstaue	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\nu_e)$	$\mathbf{C}$
1cstaumu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu s)(\bar{\tau}\gamma_\mu\nu_\mu)$	$\mathbf{C}$
5cstaumu	$\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{c}P_Rs)(\bar{ au} u_\mu)$	$\mathbf{C}$
1pcstaumu	$rac{4G_F}{\sqrt{2}}(ar{c}P_L\gamma^\mu s)(ar{ au}\gamma_\mu u_\mu)$	$^{\mathrm{C}}$
5pcstaumu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L s)(\bar{\tau}\nu_\mu)$	$^{\mathrm{C}}$
7pcstaumu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\nu_{\mu})$	$^{\mathrm{C}}$
1cstautau	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_R\gamma^\mu s)(\bar{\tau}\gamma_\mu \nu_ au)$	$^{\mathrm{C}}$
5cstautau	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_Rs)(\bar{\tau}\nu_{\tau})$	$\mathbf{C}$
1pcstautau	$rac{4 \widetilde{G_F}}{\sqrt{2}} (ar{c} P_L \gamma^\mu s) (ar{ au} \gamma_\mu  u_ au)$	$\mathbf{C}$
5pcstautau	$\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{c}P_Ls)(\bar{\tau}\nu_{ au})$	$\mathbf{C}$
7pcstautau	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_L\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\nu_{\tau})$	С

# sdcu

WC name	Operator	Type
1dsuc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{u}\gamma^\mu c)$	С
2dsuc	$\frac{4\ddot{Q}_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_\mu T^A s)(\bar{u}\gamma^\mu T^A c)$	$\mathbf{C}$
3dsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{u}\gamma^{\mu\nu\rho}c)$	$\mathbf{C}$
4dsuc	$\frac{4\tilde{Q}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}T^As)(\bar{u}\gamma^{\mu\nu\rho}T^Ac)$	$\mathbf{C}$
5dsuc	$\frac{4\tilde{Q}_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{u}c)$	$\mathbf{C}$
6dsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_RT^As)(\bar{u}T^Ac)$	$^{\mathrm{C}}$
7dsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{u}\sigma_{\mu\nu}c)$	$^{\mathrm{C}}$
8dsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}T^As)(\bar{u}\sigma_{\mu\nu}T^Ac)$	$^{\mathrm{C}}$
9dsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{u}\gamma^{\mu\nu\rho\sigma}c)$	$^{\mathrm{C}}$
10dsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}T^As)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^Ac)$	$^{\mathrm{C}}$
1pdsuc	$\frac{4 \overleftarrow{Q_F}}{\sqrt{2}} (\bar{d} P_L \gamma_\mu s) (\bar{u} \gamma^\mu c)$	$^{\mathrm{C}}$
2pdsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu T^As)(\bar{u}\gamma^\mu T^Ac)$	$\mathbf{C}$
3pdsuc	$\frac{4\overleftarrow{Q_F}}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{u}\gamma^{\mu\nu\rho}c)$	$^{\mathrm{C}}$
4pdsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}T^As)(\bar{u}\gamma^{\mu\nu\rho}T^Ac)$	$^{\mathrm{C}}$
5pdsuc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{u}c)$	$\mathbf{C}$
6pdsuc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_LT^As)(\bar{u}T^Ac)$	$^{\mathrm{C}}$
7pdsuc	$\frac{4 \overleftarrow{Q_F}}{\sqrt{2}} (\bar{d} P_L \sigma^{\mu  u} s) (\bar{u} \sigma_{\mu  u} c)$	$\mathbf{C}$
8pdsuc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}T^As)(\bar{u}\sigma_{\mu\nu}T^Ac)$	$\mathbf{C}$
9pdsuc	$\frac{4\overleftarrow{Q_F}}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{u}\gamma^{\mu\nu\rho\sigma}c)$	$\mathbf{C}$
10pdsuc	$\frac{4\tilde{Y}_{F}^{\sigma}}{\sqrt{2}}(\bar{d}P_{L}\gamma_{\mu\nu\rho\sigma}T^{A}s)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^{A}c)$	$\mathbf{C}$

# sduc

WC name	Operator	Type
1dscu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{c}\gamma^\mu u)$	C
2dscu	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{c}\gamma^\mu u)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu T^A s)(\bar{c}\gamma^\mu T^A u)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho} s)(\bar{c}\gamma^{\mu\nu\rho} u)$	$^{\mathrm{C}}$
3dscu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{c}\gamma^{\mu\nu\rho}u)$	$\mathbf{C}$
4dscu	$\frac{4G_F}{\overline{c}}(\bar{d}P_B\gamma_{\mu\nu\rho}T^As)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	$^{\mathrm{C}}$
5dscu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{c}u)$	$^{\mathrm{C}}$
6dscu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_RT^As)(\bar{c}T^Au)$	$^{\mathrm{C}}$
7dscu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{c}\sigma_{\mu\nu}u)$	$^{\mathrm{C}}$
8dscu	$\frac{4\bar{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}T^As)(\bar{c}\sigma_{\mu\nu}T^Au)$	$\mathbf{C}$
9dscu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	$\mathbf{C}$
10dscu	$ \frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{c}u) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}P_RT^As)(\bar{c}T^Au) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{c}\sigma_{\mu\nu}u) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}T^As)(\bar{c}\sigma_{\mu\nu}T^Au) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{c}\gamma^{\mu\nu\rho\sigma}u) \\ \frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}T^As)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Au) $	$\mathbf{C}$

WC name	Operator	Type
1pdscu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{c}\gamma^\mu u)$	С
2pdscu	$\frac{4\breve{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu T^A s)(\bar{c}\gamma^\mu T^A u)$	$^{\mathrm{C}}$
3pdscu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{c}\gamma^{\mu\nu\rho}u)$	$^{\mathrm{C}}$
4pdscu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}T^As)(\bar{c}\gamma^{\mu\nu\rho}T^Au)$	$^{\mathrm{C}}$
5pdscu	$\frac{4\overset{C}{C_F}}{\sqrt{2}}(\bar{d}P_L s)(\bar{c}u)$ $\frac{4\overset{C}{C_F}}{\sqrt{2}}(\bar{d}P_L T^A s)(\bar{c}T^A u)$	$^{\mathrm{C}}$
6pdscu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_LT^As)(\bar{c}T^Au)$	$^{\mathrm{C}}$
7pdscu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{c}\sigma_{\mu\nu}u)$	$^{\mathrm{C}}$
8pdscu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}T^As)(\bar{c}\sigma_{\mu\nu}T^Au)$	$^{\mathrm{C}}$
9pdscu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)$	$^{\mathrm{C}}$
10pdscu	$\frac{\frac{4\check{G}_{F}^{F}}{\sqrt{2}}(\bar{d}P_{L}\gamma_{\mu\nu\rho\sigma}s)(\bar{c}\gamma^{\mu\nu\rho\sigma}u)}{\frac{4G_{F}}{\sqrt{2}}(\bar{d}P_{L}\gamma_{\mu\nu\rho\sigma}T^{A}s)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^{A}u)}$	С

# sd

WC name	Operator	Type
7gammads	$\frac{4G_F}{\sqrt{2}}\frac{e}{a_s^2}m_s(\bar{d}P_R\sigma_{\mu\nu}s)F^{\mu\nu}$	C
8gds	$\frac{4\overset{Q^{\prime}}{G_{F}}}{\sqrt{2}}\frac{g_{s}}{g_{s}}m_{s}(\bar{d}P_{R}\sigma_{\mu\nu}T^{A}s)G_{A}^{\mu\nu}$	$\mathbf{C}$
7pgammads	$rac{4\ddot{Q}_F^2}{\sqrt{2}}rac{\ddot{g}^3}{a^2}m_s(ar{d}P_L\sigma_{\mu u}s)F^{\mu u}$	$\mathbf{C}$
8pgds	$rac{4G_F^2}{\sqrt{2}}rac{g_s}{g_s}m_s(ar{d}P_L\sigma_{\mu u}T^As)G_A^{\mu u}$	$\mathbf{C}$
1dsuu	$\frac{4Q_F^2}{\sqrt{2}}(dP_R\gamma_\mu s)(\bar{u}\gamma^\mu u)$	$\mathbf{C}$
2dsuu	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_\mu T^A s)(\bar{u}\gamma^\mu T^A u)$	$\mathbf{C}$
3dsuu	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{u}\gamma^{\mu\nu\rho}u)$	$^{\mathrm{C}}$
4dsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}T^As)(\bar{u}\gamma^{\mu\nu\rho}T^Au)$	$^{\mathrm{C}}$
5dsuu	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_Rs)(\bar{u}u)$	$\mathbf{C}$
6dsuu	$\frac{4\widetilde{G}_F}{\sqrt{2}}(ar{d}P_RT^As)(ar{u}T^Au)$	$\mathbf{C}$
7dsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{u}\sigma_{\mu\nu}u)$	$\mathbf{C}$
8dsuu	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}T^As)(\bar{u}\sigma_{\mu\nu}T^Au)$	$\mathbf{C}$
9dsuu	$\frac{4\overset{\checkmark}{Q_F}}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{u}\gamma^{\mu\nu\rho\sigma}u)$	$\mathbf{C}$
10dsuu	$\frac{4\overleftarrow{Q_F}}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}T^As)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^Au)$	$\mathbf{C}$
1pdsuu	$\frac{4\widetilde{Q}_F^2}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{u}\gamma^\mu u)$	$\mathbf{C}$
2pdsuu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu T^As)(\bar{u}\gamma^\mu T^Au)$	$\mathbf{C}$
3pdsuu	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{u}\gamma^{\mu\nu\rho}u)$	$\mathbf{C}$
4pdsuu	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}T^As)(\bar{u}\gamma^{\mu\nu\rho}T^Au)$	$\mathbf{C}$
5pdsuu	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_L s)(\bar{u}u)$	$\mathbf{C}$
6pdsuu	$\frac{4\overleftarrow{Q_F}}{\sqrt{2}}(ar{d}P_LT^As)(ar{u}T^Au)$	$\mathbf{C}$
7pdsuu	$\frac{4\overleftarrow{Q_F}}{\sqrt{2}}(ar{d}P_L\sigma^{\mu u}s)(ar{u}\sigma_{\mu u}u)$	$\mathbf{C}$
8pdsuu	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}T^As)(\bar{u}\sigma_{\mu\nu}T^Au)$	$\mathbf{C}$

WC name	Operator	Type
9pdsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{u}\gamma^{\mu\nu\rho\sigma}u)$	С
10pdsuu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}T^As)(\bar{u}\gamma^{\mu\nu\rho\sigma}T^Au)$	$\mathbf{C}$
1dscc	$rac{4 \check{G}_F^{\sigma}}{\sqrt{2}} (ar{d} P_R \gamma_{\mu} s) (ar{c} \gamma^{\mu} c)$	$\mathbf{C}$
2dscc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu T^A s)(\bar{c}\gamma^\mu T^A c)$	$\mathbf{C}$
3dscc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{c}\gamma^{\mu\nu\rho}c)$	$\mathbf{C}$
4dscc	$\frac{4 \overleftarrow{S}_F^2}{\sqrt{2}} (\bar{d} P_R \gamma_{\mu\nu\rho} T^A s) (\bar{c} \gamma^{\mu\nu\rho} T^A c)$	$\mathbf{C}$
5dscc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{c}c)$	$\mathbf{C}$
6dscc	$\frac{4 \check{G}_F^2}{\sqrt{2}} (\bar{d} P_R T^A s) (\bar{c} T^A c)$	$\mathbf{C}$
7dscc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{c}\sigma_{\mu\nu}c)$	$\mathbf{C}$
8dscc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}T^As)(\bar{c}\sigma_{\mu\nu}T^Ac)$	$\mathbf{C}$
9dscc	$\frac{4\widetilde{G}_F^c}{\sqrt{2}}(ar{d}P_R\gamma_{\mu u ho\sigma}s)(ar{c}\gamma^{\mu u ho\sigma}c)$	$\mathbf{C}$
10dscc	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}T^As)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Ac)$	$\mathbf{C}$
1pdscc	$rac{4\overset{\sim}{Q_F}}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{c}\gamma^\mu c)$	$\mathbf{C}$
2pdscc	$\frac{4\overset{Q^2}{Q_E}}{\sqrt{2}}(ar{d}P_L\gamma_\mu T^As)(ar{c}\gamma^\mu T^Ac)$	$\mathbf{C}$
3pdscc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu u ho}s)(\bar{c}\gamma^{\mu u ho}c)$	$\mathbf{C}$
4pdscc	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}T^As)(\bar{c}\gamma^{\mu\nu\rho}T^Ac)$	$\mathbf{C}$
5pdscc	$\frac{4\overset{Q}{Q}_{F}}{\sqrt{2}}(\bar{d}P_{L}s)(\bar{c}c)$	$\mathbf{C}$
6pdscc	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_LT^As)(\bar{c}T^Ac)$	$\mathbf{C}$
7pdscc	$\frac{4G_F^2}{\sqrt{2}}(ar{d}P_L\sigma^{\mu u}s)(ar{c}\sigma_{\mu u}c)$	$\mathbf{C}$
8pdscc	$\frac{4\tilde{Q}_F^2}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}T^As)(\bar{c}\sigma_{\mu\nu}T^Ac)$	$\mathbf{C}$
9pdscc	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{c}\gamma^{\mu\nu\rho\sigma}c)$	$\mathbf{C}$
10pdscc	$\frac{4\ddot{Q}_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}T^As)(\bar{c}\gamma^{\mu\nu\rho\sigma}T^Ac)$	$\mathbf{C}$
1dsss	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{s}\gamma^\mu s)$	$\mathbf{C}$
3dsss	$rac{4ar{G}_F^E}{\sqrt{2}}(ar{d}P_R\gamma_\mu s)(ar{s}\gamma^\mu s) \ rac{4G_F}{\sqrt{2}}(ar{d}P_R\gamma_{\mu u ho}s)(ar{s}\gamma^{\mu u ho}s)$	$\mathbf{C}$
5dsss	$\frac{4\overset{Q}{S_F}}{\sqrt{2}}(\bar{d}P_Rs)(\bar{s}s)$	$\mathbf{C}$
7dsss	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{s}\sigma_{\mu\nu}s)$	$\mathbf{C}$
9dsss	$rac{4G_F^2}{\sqrt{2}}(ar{d}P_R\gamma_{\mu u ho\sigma}s)(ar{s}\gamma^{\mu u ho\sigma}s)$	$\mathbf{C}$
1pdsss	$\frac{4Q_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{s}\gamma^\mu s)$	$\mathbf{C}$
3pdsss	$\frac{\frac{4\ddot{G}_{F}}{\sqrt{2}}(\bar{d}P_{L}\gamma_{\mu}s)(\bar{s}\gamma^{\mu}s)}{\frac{4G_{F}}{\sqrt{2}}(\bar{d}P_{L}\gamma_{\mu\nu\rho}s)(\bar{s}\gamma^{\mu\nu\rho}s)}$	$\mathbf{C}$
5pdsss	$4G_F(AD_{-2})(\overline{a}_2)$	$\mathbf{C}$
7pdsss	$\frac{4\overset{C}{G_F}}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{s}\sigma_{\mu\nu}s)$	$\mathbf{C}$
9pdsss	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{d} P_L \gamma_{\mu\nu\rho\sigma} s) (\bar{s} \gamma^{\mu\nu\rho\sigma} s)$	$\mathbf{C}$
1dsdd	$\frac{4 \check{G}_F^F}{\sqrt{2}} (\bar{d} \gamma_\mu P_L s) (\bar{d} \gamma^\mu d)$	$\mathbf{C}$
1pdsdd	$\frac{4 {\rm G}_F}{\sqrt{2}} (ar{d} \gamma_\mu P_R s) (ar{d} \gamma^\mu d)$	$\mathbf{C}$
3dsdd	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{d} \gamma_{\mu  u  ho} P_L s) (\bar{d} \gamma^{\mu  u  ho} d)$	$\mathbf{C}$
3pdsdd	$\begin{split} &\frac{\sqrt{\hat{z}}}{\sqrt{\hat{z}}}(dP_L s)(ss) \\ &\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{s}\sigma_{\mu\nu}s) \\ &\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{s}\gamma^{\mu\nu\rho\sigma}s) \\ &\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu}P_L s)(\bar{d}\gamma^{\mu}d) \\ &\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu}P_R s)(\bar{d}\gamma^{\mu}d) \\ &\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho}P_L s)(\bar{d}\gamma^{\mu\nu\rho}d) \\ &\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho}P_R s)(\bar{d}\gamma^{\mu\nu\rho}d) \\ &\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho}P_R s)(\bar{d}\gamma^{\mu\nu\rho}d) \\ &\frac{4G_F}{\sqrt{2}}(\bar{d}P_L s)(\bar{d}d) \end{split}$	$\mathbf{C}$
5dsdd	$\frac{4\ddot{G}_{F}^{c}}{\sqrt{c}}(\bar{d}P_{L}s)(\bar{d}d)$	$\mathbf{C}$

WC name	Operator	Type
5pdsdd	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{d}d)$	C
7dsdd	$\frac{4\overset{\circ}{G_F}}{\overset{\checkmark}{\sqrt{2}}}(ar{d}\sigma^{\mu u}P_Ls)(ar{d}\sigma_{\mu u}d)$	$\mathbf{C}$
7pdsdd	$\frac{4G_F}{\sqrt{2}}(d\sigma^{\mu\nu}P_Rs)(d\sigma_{\mu\nu}d)$	$\mathbf{C}$
9dsdd	$\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho\sigma}P_Ls)(\bar{d}\gamma^{\mu\nu\rho\sigma}d)$	$\mathbf{C}$
9pdsdd	$\frac{4G_F}{\sqrt{2}}(\bar{d}\gamma_{\mu\nu\rho\sigma}P_Rs)(\bar{d}\gamma^{\mu\nu\rho\sigma}d)$	$\mathbf{C}$
1dsee	$rac{4 ar{G}_F^{arepsilon}}{\sqrt{2}} (ar{d} P_R \gamma_\mu s) (ar{e} \gamma^\mu e)$	$\mathbf{C}$
1pdsee	$\frac{4\tilde{G}_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{e}\gamma^\mu e)$	$\mathbf{C}$
3dsee	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu}s)(\bar{e}\gamma^{\mu}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}e)}$	$\mathbf{C}$
3pdsee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}e)$	$\mathbf{C}$
5dsee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{e}e)$	$\mathbf{C}$
5pdsee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{e}e)$	$\mathbf{C}$
7dsee	$\frac{4\widetilde{G_F}}{\sqrt{2}}(ar{d}P_R\sigma^{\mu u}s)(ar{e}\sigma_{\mu u}e)$	$\mathbf{C}$
7pdsee	$\frac{4G_F}{G_F}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}e)$	$\mathbf{C}$
9dsee	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}e)$	$\mathbf{C}$
9pdsee	$\frac{4G_F^2}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}e)$	$\mathbf{C}$
1dsmumu	$\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\mu}\gamma^\mu\mu)$	$\mathbf{C}$
1pdsmumu	$rac{4rac{G_F}{\sqrt{2}}}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{\mu}\gamma^\mu\mu)$	$\mathbf{C}$
3dsmumu	$\frac{4\tilde{G}_F^c}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}\mu)$	$\mathbf{C}$
3pdsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu u ho}s)(\bar{\mu}\gamma^{\mu u ho}\mu)$	$\mathbf{C}$
5dsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{\mu}\mu)$	$\mathbf{C}$
5pdsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L s)(\bar{\mu}\mu)$	$\mathbf{C}$
7dsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\mu)$	$\mathbf{C}$
7pdsmumu	$rac{4 ar{G}_F}{\sqrt{2}} (ar{d} P_L \sigma^{\mu  u} s) (ar{\mu} \sigma_{\mu  u} \mu)$	$\mathbf{C}$
9dsmumu	$\frac{4\ddot{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\mu)$	$\mathbf{C}$
9pdsmumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\mu)$	$\mathbf{C}$
1dstautau	$rac{4 \overline{G_F}}{\sqrt{2}} (ar{d} P_R \gamma_\mu s) (ar{ au} \gamma^\mu  au)$	$\mathbf{C}$
1pdstautau	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\tau}\gamma^\mu\tau)$ $\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\tau}\gamma^{\mu\nu\rho}\tau)$	$\mathbf{C}$
3dstautau	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\tau}\gamma^{\mu\nu\rho}\tau)$	$\mathbf{C}$
3pdstautau	$\frac{4G_F}{\sqrt{2}}(dP_L\gamma_{\mu\nu\rho}s)(\bar{\tau}\gamma^{\mu\nu\rho}\tau)$	$\mathbf{C}$
5dstautau	46- (In ) (-)	$\mathbf{C}$
5pdstautau	$rac{4G_F}{\sqrt{2}}(ar{d}P_Ls)(ar{ au} au)$	$\mathbf{C}$
7dstautau	$rac{4\ddot{G}_F}{\sqrt{2}}(ar{d}P_R\sigma^{\mu u}s)(ar{ au}\sigma_{\mu u} au)$	$\mathbf{C}$
7pdstautau	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\tau)$	$^{\mathrm{C}}$
9dstautau	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}\tau)$	$^{\mathrm{C}}$
9pdstautau	$ \frac{{}^{4}G_{F}}{\sqrt{2}}(dP_{R}s)(\bar{\tau}\tau)  \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{d}P_{L}s)(\bar{\tau}\tau)  \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{d}P_{R}\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\tau)  \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{d}P_{L}\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\tau)  \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{d}P_{R}\gamma_{\mu\nu\rho\sigma}s)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}\tau)  \frac{{}^{4}G_{F}}{\sqrt{2}}(\bar{d}P_{L}\gamma_{\mu\nu\rho\sigma}s)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}\tau) $	$^{\mathrm{C}}$

#### sdmue

WC name	Operator	Type
1dsemu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{e}\gamma^\mu\mu)$	C
1pdsemu	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{e}\gamma^\mu\mu)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{e}\gamma^\mu\mu)}$	$\mathbf{C}$
3dsemu	$\frac{4G_F}{\sqrt{c}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}\mu)$	$\mathbf{C}$
3pdsemu	$rac{4G_F}{\sqrt{2}}(ar{d}P_L\gamma_{\mu u ho}s)(ar{e}\gamma^{\mu u ho}\mu)$	$\mathbf{C}$
5dsemu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{e}\mu)$	$\mathbf{C}$
5pdsemu	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{e}\mu)$	$\mathbf{C}$
7dsemu	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\mu)$	$\mathbf{C}$
7pdsemu	$\frac{4G_F}{G}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\mu)$	$\mathbf{C}$
9dsemu	$\frac{4\check{G}_{F}}{\sqrt{2}}(\bar{d}P_{R}\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu)$	$\mathbf{C}$
9pdsemu	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}\mu)}$	C

# sdtaue

WC name	Operator	Type
1dsetau	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{e}\gamma^\mu\tau)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{e}\gamma^\mu\tau)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}\tau)}{\sqrt{2}}$	C
1pdsetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{e}\gamma^\mu\tau)$	$\mathbf{C}$
3dsetau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{e}\gamma^{\mu\nu\rho}\tau)$	$\mathbf{C}$
3pdsetau	$\frac{\sqrt{2}}{\sqrt{2}} (\bar{d}P_L \gamma_{\mu\nu\rho} s) (\bar{e}\gamma^{\mu\nu\rho} \tau)$	$\mathbf{C}$
5dsetau	$\frac{4G_F}{\overline{c}}(\bar{d}P_Bs)(\bar{e}\tau)$	$\mathbf{C}$
5pdsetau	$rac{4G_F}{\sqrt{2}}(ar{d}P_Ls)(ar{e} au) \ rac{4G_F}{\sqrt{2}}(ar{d}P_R\sigma^{\mu u}s)(ar{e}\sigma_{\mu u} au)$	$\mathbf{C}$
7dsetau	$\frac{4\bar{G_F}}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{e}\sigma_{\mu\nu}\tau)$	$\mathbf{C}$
7pdsetau	$\frac{4G_F}{E}(dP_T\sigma^{\mu\nu}s)(\bar{e}\sigma\tau)$	$\mathbf{C}$
9dsetau	$\frac{4\check{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{e}\gamma^{\mu\nu\rho\sigma}\tau)$	$\mathbf{C}$
9pdsetau	$\frac{\sqrt{2}}{\sqrt{2}} (\bar{d}P_R \gamma_{\mu\nu\rho\sigma} s) (\bar{e}\gamma^{\mu\nu\rho\sigma} \tau)  \frac{4G_F}{\sqrt{2}} (\bar{d}P_L \gamma_{\mu\nu\rho\sigma} s) (\bar{e}\gamma^{\mu\nu\rho\sigma} \tau) $	$\mathbf{C}$

# sdemu

WC name	Operator	Type
1dsmue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\mu}\gamma^\mu e)$	С
1pdsmue	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\mu}\gamma^\mu e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\mu}\gamma^\mu e)}$	$\mathbf{C}$
3dsmue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}e)$	$\mathbf{C}$
3pdsmue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}e)$	$\mathbf{C}$
5dsmue	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{\mu}\gamma^{\mu\nu\rho}e)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{\mu}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{\mu}e)}$	$\mathbf{C}$

WC name	Operator	Type
5pdsmue	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L s)(\bar{\mu}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R \sigma^{\mu\nu} s)(\bar{\mu}\sigma_{\mu\nu}e)}$ $\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L \sigma^{\mu\nu} s)(\bar{\mu}\sigma_{\mu\nu}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L \sigma^{\mu\nu} s)(\bar{\mu}\sigma_{\mu\nu}e)}$	C
7dsmue	$\frac{4 \tilde{G}_F}{\sqrt{2}} (\bar{d} P_R \sigma^{\mu\nu} s) (\bar{\mu} \sigma_{\mu\nu} e)$	$\mathbf{C}$
7pdsmue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}e)$	$\mathbf{C}$
9dsmue	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e)}$	$\mathbf{C}$
9pdsmue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}e)$	C

# ${\tt sdtaumu}$

WC name	Operator	Type
1dsmutau	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\mu}\gamma^\mu\tau)$	C
1pdsmutau	$\frac{4G_F}{\overline{c}}(\bar{d}P_T\gamma_{"}s)(\bar{\mu}\gamma^{\mu}\tau)$	$\mathbf{C}$
3dsmutau	$rac{4G_F}{\sqrt{2}}(ar{d}P_R\gamma_{\mu u ho}s)(ar{\mu}\gamma^{\mu u ho} au)$	$^{\mathrm{C}}$
3pdsmutau	$rac{4G_F}{\sqrt{2}}(ar{d}P_L\gamma_{\mu u ho}s)(ar{\mu}\gamma^{\mu u ho} au)$	$^{\mathrm{C}}$
5dsmutau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{\mu} au)$	$\mathbf{C}$
5pdsmutau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{\mu} au)$	$^{\mathrm{C}}$
7dsmutau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\tau)$	$\mathbf{C}$
7pdsmutau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{\mu}\sigma_{\mu\nu}\tau)$	$\mathbf{C}$
9dsmutau	$\frac{4\bar{G_F}}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\tau)$	$\mathbf{C}$
9pdsmutau	$\frac{4\ddot{G}_F^2}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\tau)$ $\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{\mu}\gamma^{\mu\nu\rho\sigma}\tau)$	$\mathbf{C}$

#### sdetau

WC name	Operator	Type
1dstaue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\tau}\gamma^\mu e)$	C
1pdstaue	$rac{4\check{G}_F}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{ au}\gamma^\mu e)$	$\mathbf{C}$
3dstaue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\tau}\gamma^{\mu\nu\rho}e)$	$\mathbf{C}$
3pdstaue	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho}s)(\bar{\tau}\gamma^{\mu\nu\rho}e)$	$\mathbf{C}$
5dstaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Rs)(\bar{\tau}e)$	$\mathbf{C}$
5pdstaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_Ls)(\bar{\tau}e)$	$\mathbf{C}$
7dstaue	$\frac{4\check{G}_{F}}{\sqrt{2}}(\bar{d}P_{R}\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}e)$	$\mathbf{C}$
7pdstaue	$\frac{4\widetilde{G}_{F}}{\sqrt{2}}(\bar{d}P_{L}\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}e)$	$\mathbf{C}$
9dstaue	$\frac{4\check{G}_{F}}{\sqrt{2}}(\bar{d}P_{R}\gamma_{\mu\nu\rho\sigma}s)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}e)$	$\mathbf{C}$
9pdstaue	$\frac{\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}e)}{\frac{4\ddot{G_F}}{\sqrt{2}}(\bar{d}P_L\gamma_{\mu\nu\rho\sigma}s)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}e)}$	$^{\mathrm{C}}$

#### sdmutau

WC name	Operator	Type
1dstaumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\tau}\gamma^\mu\mu)$	C
1pdstaumu	$\frac{\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\tau}\gamma^\mu\mu)}{\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\tau}\gamma^{\mu\nu\rho}\mu)}$	$\mathbf{C}$
3dstaumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho}s)(\bar{\tau}\gamma^{\mu\nu\rho}\mu)$	$\mathbf{C}$
3pdstaumu	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{d} P_L \gamma_{\mu\nu\rho} s) (\bar{\tau} \gamma^{\mu\nu\rho} \mu)$	$\mathbf{C}$
5dstaumu	$\frac{4 \check{G}_F}{\sqrt{2}} (\bar{d} P_R s) (\bar{ au} \mu)$	$\mathbf{C}$
5pdstaumu	$\frac{4 \tilde{Q}_F}{\sqrt{2}} (\bar{d} P_L s) (\bar{\tau} \mu)$	$\mathbf{C}$
7dstaumu	$rac{4\check{G}_{F}^{\sigma}}{\sqrt{2}}(ar{d}P_{R}\sigma^{\mu u}s)(ar{ au}\sigma_{\mu u}\mu)$	$\mathbf{C}$
7pdstaumu	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_L\sigma^{\mu\nu}s)(\bar{\tau}\sigma_{\mu\nu}\mu)$	$\mathbf{C}$
9dstaumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_{\mu\nu\rho\sigma}s)(\bar{\tau}\gamma^{\mu\nu\rho\sigma}\mu)$	$\mathbf{C}$
9pdstaumu	$\frac{\sqrt[4]{G_F}}{\sqrt{2}} (\bar{d}P_R \gamma_{\mu\nu\rho\sigma} s) (\bar{\tau} \gamma^{\mu\nu\rho\sigma} \mu)  \frac{\sqrt[4]{G_F}}{\sqrt{2}} (\bar{d}P_L \gamma_{\mu\nu\rho\sigma} s) (\bar{\tau} \gamma^{\mu\nu\rho\sigma} \mu)$	С

# sdnunu

WC name	Operator	Type
nu1dsee	$\frac{4G_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_e)$	C
nu1pdsee	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_e)$	$^{\mathrm{C}}$
nu1dsmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_\mu\gamma^\mu\nu_\mu)$	$^{\mathrm{C}}$
nu1pdsmumu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_\mu\gamma^\mu u_\mu)$	$^{\mathrm{C}}$
nu1dstautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_\tau\gamma^\mu\nu_ au)$	$^{\mathrm{C}}$
nu1pdstautau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_ au\gamma^\mu u_ au)$	$^{\mathrm{C}}$
nu1dsemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_e\gamma^\mu\nu_\mu)$	$^{\mathrm{C}}$
nu1pdsemu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{ u}_e\gamma^\mu u_\mu)$	$^{\mathrm{C}}$
nu1dsmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{ u}_\mu\gamma^\mu u_e)$	$\mathbf{C}$
nu1pdsmue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_\mu\gamma^\mu\nu_e)$	$\mathbf{C}$
nu1dsetau	$rac{4 \overleftarrow{G_F}}{\sqrt{2}} (ar{d} P_R \gamma_\mu s) (ar{ u}_e \gamma^\mu  u_ au)$	$\mathbf{C}$
nu1pdsetau	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_e\gamma^\mu u_ au)$	$^{\mathrm{C}}$
nu1dstaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_R\gamma_\mu s)(\bar{\nu}_\tau\gamma^\mu\nu_e)$	$^{\mathrm{C}}$
nu1pdstaue	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}P_L\gamma_\mu s)(\bar{\nu}_\tau\gamma^\mu\nu_e)$	$\mathbf{C}$
nu1dstaumu	$\frac{4\check{G}_F^{\Gamma}}{\sqrt{2}}(ar{d}P_R\gamma_{\mu}s)(ar{ u}_{ au}\gamma^{\mu} u_{\mu})$	$\mathbf{C}$
nu1pdstaumu	$rac{4 \overleftarrow{G_F}}{\sqrt{2}} (ar{d} P_L \gamma_\mu s) (ar{ u}_ au \gamma^\mu  u_\mu)$	$\mathbf{C}$
nu1dsmutau	$rac{4 \overleftarrow{G_F}}{\sqrt{2}} (ar{d} P_R \gamma_\mu s) (ar{ u}_\mu \gamma^\mu  u_ au)$	$\mathbf{C}$
nu1pdsmutau	$rac{4reve{G}_F}{\sqrt{2}}(ar{d}P_L\gamma_\mu s)(ar{ u}_\mu\gamma^\mu u_ au)$	$\mathbf{C}$

#### cucu

WC name	Operator	Type
1cucu	$\frac{4G_F}{\sqrt{2}}(\bar{c}\gamma_\mu P_L u)(\bar{c}\gamma^\mu P_L u)$	C
5cucu	$\frac{4G_F}{\sqrt{2}}(\bar{c}_{\alpha}P_Lu_{\beta})(\bar{c}_{\beta}P_Ru_{\alpha})$ $\frac{4G_F}{\sqrt{2}}(\bar{c}P_Lu)(\bar{c}P_Lu)$ $\frac{4G_F}{\sqrt{2}}(\bar{c}\gamma_{\mu}P_Ru)(\bar{c}\gamma^{\mu}P_Ru)$ $\frac{4G_F}{\sqrt{2}}(\bar{c}_{\alpha}P_Lu_{\beta})(\bar{c}_{\beta}P_Lu_{\alpha})$	$\mathbf{C}$
2cucu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Lu)(\bar{c}P_Lu)$	$\mathbf{C}$
1pcucu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}\gamma_\mu P_R u)(\bar{c}\gamma^\mu P_R u)$	$\mathbf{C}$
3cucu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}_{\alpha}P_Lu_{\beta})(\bar{c}_{\beta}P_Lu_{\alpha})$	$\mathbf{C}$
2pcucu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Ru)(\bar{c}P_Ru)$	$\mathbf{C}$
4cucu	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}P_Lu)(\bar{c}P_Ru)$	$\mathbf{C}$
3pcucu	$\frac{4G_F}{\sqrt{2}}(\bar{c}P_Ru)(\bar{c}P_Ru)$ $\frac{4G_F}{\sqrt{2}}(\bar{c}P_Lu)(\bar{c}P_Ru)$ $\frac{4G_F}{\sqrt{2}}(\bar{c}_\alpha P_Ru_\beta)(\bar{c}_\beta P_Ru_\alpha)$	$^{\mathrm{C}}$

# dF=0

WC name	Operator	Type
G	$\frac{4G_F}{\sqrt{2}}\frac{1}{q_s}f^{ABC}G^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ ho}$	R
Gtilde	$rac{4G_F}{\sqrt{2}}rac{q}{q_s}f^{ABC}\widetilde{G}^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ ho}$	R
ugamma_11	$rac{4 ilde{G_F}}{\sqrt{2}}rac{e}{g_z^2}m_uar{u}_L\sigma^{\mu u}u_RF_{\mu u}$	$\mathbf{C}$
ugamma_22	$rac{4ar{G}_F}{\sqrt{2}}rac{e}{g_s^2}m_car{c}_L\sigma^{\mu u}c_RF_{\mu u}$	$^{\mathrm{C}}$
dgamma_11	$rac{4ar{G}_F}{\sqrt{2}}rac{s_c^s}{g_z^2}m_dar{d}_L\sigma^{\mu u}d_RF_{\mu u} \ rac{4ar{G}_F}{\sqrt{2}}rac{s_c^s}{g_z^2}m_sar{s}_L\sigma^{\mu u}s_RF_{\mu u}$	$^{\mathrm{C}}$
dgamma_22	$rac{4G_F}{\sqrt{2}}rac{e}{g_s^2}m_sar{s}_L\sigma^{\mu u}s_RF_{\mu u}$	$^{\mathrm{C}}$
uG_11	$rac{4\overset{Y^2}{\mathcal{G}_F}}{\sqrt{2}}rac{g_s}{g_s}m_uar{u}_L\sigma^{\mu u}T^Au_RG^A_{\mu u}$	$\mathbf{C}$
uG_22	$\frac{4G_F}{\sqrt{2}}\frac{1}{q_s}m_c\bar{c}_L\sigma^{\mu\nu}T^Ac_RG^A_{\mu\nu}$	$\mathbf{C}$
dG_11	$rac{4 G_F}{\sqrt{2}} rac{\ddot{g_s}}{g_s} m_d ar{d}_L \sigma^{\mu  u} T^A d_R  G_{\mu  u}^A$	$\mathbf{C}$
dG_22	$rac{4G_F}{\sqrt{2}}rac{1}{g_s}m_sar{s}_L\sigma^{\mu u}T^As_RG^A_{\mu u}$	$^{\mathrm{C}}$
TeuRR_1111	$rac{4G_F}{\sqrt{2}}(ar{e}_L\sigma^{\mu u}e_R)(ar{u}_L\sigma_{\mu u}u_R)$	$^{\mathrm{C}}$
TeuRR_1122	$rac{4G_F}{\sqrt{2}}(ar{e}_L\sigma^{\mu u}e_R)(ar{c}_L\sigma_{\mu u}c_R)$	$^{\mathrm{C}}$
TeuRR_2211	$rac{4G_F}{\sqrt{2}}(ar{\mu}_L\sigma^{\mu u}\mu_R)(ar{u}_L\sigma_{\mu u}u_R)$	$^{\mathrm{C}}$
TeuRR_2222	$rac{4G_F}{\sqrt{2}}(ar{\mu}_L\sigma^{\mu u}\mu_R)(ar{c}_L\sigma_{\mu u}c_R)$	$^{\mathrm{C}}$
TeuRR_3311	$rac{4G_F}{\sqrt{2}}(ar{ au}_L\sigma^{\mu u} au_R)(ar{u}_L\sigma_{\mu u}u_R)$	$^{\mathrm{C}}$
TeuRR_3322	$rac{4G_F}{\sqrt{2}}(ar{ au}_L\sigma^{\mu u} au_R)(ar{c}_L\sigma_{\mu u}c_R)$	$\mathbf{C}$
TedRR_1111	$rac{4G_F}{\sqrt{2}}(ar{e}_L\sigma^{\mu u}e_R)(ar{d}_L\sigma_{\mu u}d_R)$	$^{\mathrm{C}}$
TedRR_1122	$rac{4G_F}{\sqrt{2}}(ar{e}_L\sigma^{\mu u}e_R)(ar{s}_L\sigma_{\mu u}s_R)$	$\mathbf{C}$
TedRR_2211	$rac{4ar{G}_F}{\sqrt{2}}(ar{\mu}_L\sigma^{\mu u}\mu_R)(ar{d}_L\sigma_{\mu u}d_R)$	$^{\mathrm{C}}$
TedRR_2222	$rac{4ar{G}_F}{\sqrt{2}}(ar{\mu}_L\sigma^{\mu u}\mu_R)(ar{s}_L\sigma_{\mu u}s_R)$	$^{\mathrm{C}}$
TedRR_3311	$rac{4ar{G_F}}{\sqrt{2}}(ar{ au}_L\sigma^{\mu u} au_R)(ar{d}_L\sigma_{\mu u}d_R)$	$\mathbf{C}$
TedRR_3322	$rac{4ar{G}_F}{\sqrt{2}}(ar{ au}_L\sigma^{\mu u} au_R)(ar{s}_L\sigma_{\mu u}s_R)$	$^{\mathrm{C}}$

WC name	Operator	Type
S1uuRR_1111	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L u_R)(\bar{u}_L u_R)$	C
S1uuRR_1122	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}_L u_R)(\bar{c}_L c_R)$	$\mathbf{C}$
S1uuRR_1221	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L c_R)(\bar{c}_L u_R)$	$\mathbf{C}$
S1uuRR_2222	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L c_R)(\bar{c}_L c_R)$	$\mathbf{C}$
S8uuRR_1111	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{u}_L T^A u_R)$	$\mathbf{C}$
S8uuRR_1122	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{c}_L T^A c_R)$	$\mathbf{C}$
S8uuRR_1221	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L T^A c_R)(\bar{c}_L T^A u_R)$	$\mathbf{C}$
S8uuRR_2222	$\frac{4G_F}{\sqrt{2}}(\bar{c}_L T^A c_R)(\bar{c}_L T^A c_R)$	$\mathbf{C}$
S1udRR_1111	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L u_R)(\bar{d}_L d_R)$	$\mathbf{C}$
S1udRR_1122	$\frac{4G_F}{\sqrt{2}}(\bar{u}_L u_R)(\bar{s}_L s_R)$	$\mathbf{C}$
S1udRR_2211	$rac{4ar{G_F}}{\sqrt{2}}(ar{c}_L c_R)(ar{d}_L d_R)$	$\mathbf{C}$
S1udRR_2222	$\frac{4\widetilde{G_F}}{\sqrt{2}}(\bar{c}_L c_R)(\bar{s}_L s_R)$	$\mathbf{C}$
S8udRR_1111	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{d}_L T^A d_R)$	$\mathbf{C}$
S8udRR_1122	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}_L T^A u_R)(\bar{s}_L T^A s_R)$	$\mathbf{C}$
S8udRR_2211	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{c}_L T^A c_R)(\bar{d}_L T^A d_R)$	$\mathbf{C}$
S8udRR_2222	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{c}_L T^A c_R)(\bar{s}_L T^A s_R)$	$\mathbf{C}$
S1ddRR_1111	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}_Ld_R)(\bar{d}_Ld_R)$	$\mathbf{C}$
S1ddRR_1122	$rac{4ar{G_F}}{\sqrt{2}}(ar{d}_L d_R)(ar{s}_L s_R)$	$\mathbf{C}$
S1ddRR_1221	$\frac{4G_F}{\sqrt{2}}(\bar{d}_L s_R)(\bar{s}_L d_R)$	$\mathbf{C}$
S1ddRR_2222	$\frac{4G_F}{\sqrt{2}}(\bar{s}_L s_R)(\bar{s}_L s_R)$	$\mathbf{C}$
S8ddRR_1111	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}_L T^A d_R)(\bar{d}_L T^A d_R)$	$\mathbf{C}$
S8ddRR_1122	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{d}_L T^A d_R)(\bar{s}_L T^A s_R)$	$\mathbf{C}$
S8ddRR_1221	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{d}_L T^A s_R)(\bar{s}_L T^A d_R)$	$\mathbf{C}$
S8ddRR_2222	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{s}_L T^A s_R)(\bar{s}_L T^A s_R)$	$\mathbf{C}$
S1udduRR_1111	$\frac{4\widetilde{G}_F}{\sqrt{2}}(\bar{u}_L d_R)(\bar{d}_L u_R)$	$\mathbf{C}$
S1udduRR_1221	$\frac{4\tilde{G}_F}{\sqrt{2}}(\bar{u}_L s_R)(\bar{s}_L u_R)$	$\mathbf{C}$
S1udduRR_2112	$\frac{4\widetilde{Q}_F^2}{\sqrt{2}}(\bar{c}_L d_R)(\bar{d}_L c_R)$	$\mathbf{C}$
S1udduRR_2222	$\frac{4\widetilde{Q}_F^2}{\sqrt{2}}(\bar{c}_L s_R)(\bar{s}_L c_R)$	$\mathbf{C}$
S8udduRR_1111	$\frac{4\widetilde{G}_F^2}{\sqrt{2}}(\bar{u}_L T^A d_R)(\bar{d}_L T^A u_R)$	$\mathbf{C}$
S8udduRR_1221	$\frac{4\overset{Q^2}{Q_F}}{\sqrt{2}}(ar{u}_LT^As_R)(ar{s}_LT^Au_R)$	$\mathbf{C}$
S8udduRR_2112	$\frac{4Q_F^2}{\sqrt{2}}(\bar{c}_L T^A d_R)(\bar{d}_L T^A c_R)$	$\mathbf{C}$
S8udduRR_2222	$\frac{4 \stackrel{A}{G_F}}{\sqrt{2}} (\bar{c}_L T^A s_R) (\bar{s}_L T^A c_R)$	С