

Process	Cross section normalization	Event generator	Perturbative order in QCD
$t\bar{t}\gamma$	NLO	MADGRAPH5_aMC@NLO	LO
Z+jets	NNLO [49]	MADGRAPH5_aMC@NLO	LO
$Z\gamma, W\gamma, VV, VVV, t\bar{t}V, tZq, tWZ, tHq, tHW, t\bar{t}VV, t\bar{t}t\bar{t}$	NLO	MADGRAPH5_aMC@NLO	NLO
$t\bar{t}$	NNLO+NNLL [50]	POWHEG	NLO
single t (t channel)	NLO [51, 52]	POWHEG	NLO
single t (s channel)	NLO [51, 52]	MADGRAPH5_aMC@NLO	NLO
tW	NNLO [53]	POWHEG	NLO
$t\bar{t}H$	NLO	POWHEG	NLO
$gg \rightarrow ZZ$	LO	MCFM	LO