

Process	Decay Channel	Generator	Order
Signal			
$t\bar{t}HH$	Inclusive top; $HH \rightarrow 4b$	MG5_AMC	LO
$t\bar{t}HH$ (HEFT)	Inclusive top; $HH \rightarrow 4b$	MG5_AMC	LO
Backgrounds			
$t\bar{t}$	SL $t\bar{t}$ decay	POWHEG	NLO
$t\bar{t} + bb$	SL $t\bar{t}$ decay	POWHEG	NLO
$t\bar{t} + 4b$	Inclusive	MG5_AMC	LO
$t\bar{t}H$	SL $t\bar{t}$ decay; $H \rightarrow b\bar{b}$	POWHEG	NLO
$t\bar{t}Z$	Inclusive top; $Z \rightarrow b\bar{b}$	MG5_AMC	NLO
$t\bar{t}ZH$	Inclusive top; $H/Z \rightarrow b\bar{b}$	MG5_AMC	LO
$t\bar{t}ZZ$	Inclusive top; $ZZ \rightarrow 4b$	MG5_AMC	LO