

Background process	Misidentification	$e\mu$	$e\tau_h$	$\mu\tau_h$	$\tau_h\tau_h$
$Z \rightarrow \tau\tau$		EMB	EMB	EMB	EMB
$W+\text{jets}$		MC	F_F	F_F	F_F
QCD multijet production		CR	F_F	F_F	F_F
$Z \rightarrow \ell\ell$	Jet $\rightarrow \tau_h$	MC	F_F	F_F	F_F
	$\ell \rightarrow \tau_h$		MC	MC	MC
Diboson+single t^\dagger	Jet $\rightarrow \tau_h$	MC	F_F	F_F	F_F
	$\ell \rightarrow \tau_h$		MC	MC	MC
$t\bar{t}^\dagger$	Jet $\rightarrow \tau_h$	MC	F_F	F_F	F_F
	$\ell \rightarrow \tau_h$		MC	MC	MC

[†] Decays into genuine tau leptons taken from embedded samples.