

Channel	Trigger requirement	Year	Selection criteria		
			$p_T$ (GeV)	$\eta$	Isolation
$\tau_h \tau_h$	$\tau_h(35) \& \tau_h(35)$	2016	$p_T^{\tau_h} > 40$	$ \eta^{\tau_h}  < 2.1$	DNN $\tau_h$ ID
	$\tau_h(40) \& \tau_h(40)$	2017, 2018			
$\mu \tau_h$	$\mu(22)$	2016	$p_T^\mu > p_T^{\text{trigger}} + 1 \text{ GeV}$	$ \eta^\mu  < 2.1$	$I^\mu < 0.15$
	$\mu(19) \& \tau_h(21)$	2016	$p_T^{\tau_h} > 30$	$ \eta^{\tau_h}  < 2.3$	DNN $\tau_h$ ID
	$\mu(24)$	2017, 2018			
	$\mu(20) \& \tau_h(27)$	2017, 2018			
$e \tau_h$	$e(25)$	2016	$p_T^e > p_T^{\text{trigger}} + 1 \text{ GeV}$	$ \eta^e  < 2.1$	$I^e < 0.15$
	$e(27)$	2017	$p_T^{\tau_h} > 30$	$ \eta^{\tau_h}  < 2.3$	DNN $\tau_h$ ID
	$e(32)$	2018			
	$e(24) \& \tau_h(30)$	2017, 2018			
$e \mu$	$e(12) \& \mu(23)$	all years	$p_T^e > 15, p_T^\mu > 24$	$ \eta^e  < 2.4$	$I^e < 0.15$
	$e(23) \& \mu(8)$	all years	$p_T^\mu > 15, p_T^e > 24$	$ \eta^\mu  < 2.4$	$I^\mu < 0.15$