

Label	Discriminator selections
$H_{\text{tag}}$	$\text{D}b\text{tag} > 0.8$ and $105 < m_{\text{SD}} < 135 \text{ GeV}$
$t_{\text{tag}}$	$SJ_{\text{csvmax}} > 0.5426$ and $\tau_3 / \tau_2 < 0.8$ and $105 < m_{\text{SD}} < 210 \text{ GeV}$
$b_{\text{tag}}$	$\text{CSVv2} > 0.5426$
$H_{\text{antitag}}$	$m_{\text{SD}} < 30 \text{ GeV}$
$t_{\text{antitag}}$	$SJ_{\text{csvmax}} > 0.5426$ and $\tau_3 / \tau_2 > 0.65$ and $30 < m_{\text{SD}} < 105 \text{ GeV}$
$b_{\text{antitag}}$	$\text{CSVv2} < 0.5426$

### Signal region

Region	top jet	Higgs jet	b jet
SR	$t_{\text{tag}}$	$H_{\text{tag}}$	$b_{\text{tag}}$

### Background estimation

Region	top jet	Higgs jet	b jet
CR1	$t_{\text{antitag}}$	$H_{\text{antitag}}$	$b_{\text{tag}}$
CR2	$t_{\text{antitag}}$	$H_{\text{tag}}$	$b_{\text{tag}}$
CR3	$t_{\text{tag}}$	$H_{\text{antitag}}$	$b_{\text{tag}}$

### Background validation

Region	top jet	Higgs jet	b jet
CR4	$t_{\text{tag}}$	$H_{\text{tag}}$	$b_{\text{antitag}}$
CR5	$t_{\text{antitag}}$	$H_{\text{antitag}}$	$b_{\text{antitag}}$
CR6	$t_{\text{antitag}}$	$H_{\text{tag}}$	$b_{\text{antitag}}$
CR7	$t_{\text{tag}}$	$H_{\text{antitag}}$	$b_{\text{antitag}}$