

Source	$\sigma_{\text{t}\bar{\text{t}}\text{b}\bar{\text{b}}}$	$\sigma_{\text{t}\bar{\text{t}}\text{tj}}$	$\sigma_{\text{t}\bar{\text{t}}\text{b}\bar{\text{b}}}/\sigma_{\text{t}\bar{\text{t}}\text{tj}}$
b tag (b quark flavour)	19	4.7	19
b tag (c quark flavour)	14	1.3	14
b tag (light flavour)	14	9.8	9.7
JES & JER	7.8	7.4	2.6
Ratio of $\text{t}\bar{\text{t}}\text{b}\bar{\text{b}}$ and $\text{t}\bar{\text{t}}\text{bj}$	2.6	0.5	2.6
Background modelling	3.8	3.5	1.6
$\text{t}\bar{\text{t}}\text{c}\bar{\text{c}}$ fraction in the fit	5.2	1.9	4.8
Lepton trigger/identification	3.0	3.0	0
Pileup	0.4	<0.1	0.4
MC generator	9.4	6.2	3.0
μ_{F} and μ_{R} scale	2.0	2.0	1.0
scale in PS	13	9.9	10
PDFs	0.5	0.5	<0.1
Efficiency ($\text{t}\bar{\text{t}}\text{c}\bar{\text{c}}$ fraction)	0	1.3	1.3
Jet multiplicity modelling	5.0	5.0	5.0
Simulation (statistical)	1.5	1.5	1.5
Top quark p_{T} modelling	0.8	0.3	0.5
Integrated Luminosity	2.3	2.3	0
Total uncertainty	34	19	28