

**Supplementary Table 1 | Cross-study comparison of ITC cluster nomenclature.**

References This study	Busti et al.,2011	Asede et al., 2015	Marowsky et al., 2005	Duvarci and Pare, 2014	Other widely used abbreviations
Dorsomedial (ITC <sub>dm</sub> )	Imp/lap/IMG	mplITC	medial pc	ICM <sub>MD</sub>	mITCd, mITC mICN
Ventromedial (ITC <sub>vm</sub> )	(posterior part of) IN		(posterior part of) main	(posterior part of) ICM <sub>MV</sub>	(posterior part of) mITCv, Im, mainITC, main ICN
Anteroventral (ITC <sub>av</sub> )	(anterior part of) IN		(anterior part of) main	(anterior part of) ICM <sub>MV</sub>	(anterior part of) mITCv, Im, mainITC
Lateral (ITC <sub>l</sub> )	llp		lateral pc	ICM <sub>L</sub>	lICN
Apical (ITC <sub>ap</sub> )	ls <sub>LA</sub>		dorsal pc		dICN
Internal (ITC <sub>int</sub> )	li <sub>LA</sub>				
Posteroventral (ITC <sub>pv</sub> )					

Because different nomenclature and abbreviations were used for individual ITC clusters in previous work, here we organize them from representative references and summarize their correspondence to our definition used in this study. Of note, our detailed reconstructions led us to distinguish ITC<sub>vm</sub> from a more rostrally located ventral cluster, which we label ITC anteroventral (ITC<sub>av</sub>). Also, we report a new cluster – ITC posteroventral (ITC<sub>pv</sub>), which has not been reported previously.