

Synaptic parameters of inhibitory pathways. Average class parameters are marked in bold and are used predictively (in lack of reference *in vitro* data) for the remaining pathways belonging to the same class. Physical dimensions are as follows: peak conductance $\hat{g}$: nS, depression and facilitation time constants D , F , and the IPSC τ_{decay} : ms, the Hill coefficient of the nonlinear $[Ca^{2+}]_o$ dependent scaling of release probability U_{Hill} : mM, the release probability U_{SE} , the average number of vesicles in the release-ready pool N_{RRP} , and the $GABA_B/GABA_A$ ratio $\hat{g}_{ratio}$ are dimensionless.

Pre	Post	$\hat{g}$	U_{SE}	D	F	N_{RRP}	τ_{decay}	$\hat{g}_{ratio}$	U_{Hill}
IN to PC (I1)									
L6_BC	L6_BC	2.3±0.5	0.16±0.10	45±21	376±253	1.0	10.40±6.20	0.0	1.94
SBC (cACint)	PC	1.9±1.0	0.16±0.10	45±21	376±253	3.3	10.40±6.20	0.0	1.94
IN to PC and IN (I2)									
MC	PC	3.0±1.5	0.30±0.08	1250±520	2±4	1.0	8.30±2.20	0.0	1.94
DT	PC	3.0±1.5	0.25±0.13	706±405	21±9	1.0	8.30±2.20	0.0	1.94
NBC	PC	1.9±1.0	0.14±0.05	875±285	22±5	3.3	8.30±2.70	0.0	1.94
NGC	PC	0.2±0.1	0.25±0.13	706±405	21±9	1.0	36.50±1.30	0.8	1.94
L1_GABAB-	PC	0.3±0.1	0.25±0.13	706±405	21±9	1.0	8.30±2.20	0.0	1.94
SBC (dNAC)	PC	1.9±1.0	0.25±0.13	706±405	21±9	3.3	8.30±2.20	0.0	1.94
IN	*	2.3±0.5	0.25±0.13	706±405	21±9	1.0	8.30±2.20	0.0	1.94
IN to PC (I3)									
L6_BC	L6_PC	1.9±1.0	0.44±0.25	195±190	200±320	1.0	10.40±6.20	0.0	1.94
PT	PC	1.9±1.0	0.32±0.14	144±80	62±31	3.3	6.40±1.70	0.0	1.94

Proximal Targeting inhibitory mtypes: N/L/SBC, CHC. N/LBC etypes: cNAC, dSTUT, cSTUT, bSTUT have I3, while the rest of etypes; and SBC (except: cACint and dNAC) and CHC mtypes have I2 short-term dynamics. Distal Targeting inhibitory mtypes: BP, DBC, BTC. L1_GABAB- comprise all non NGC mtypes in L1