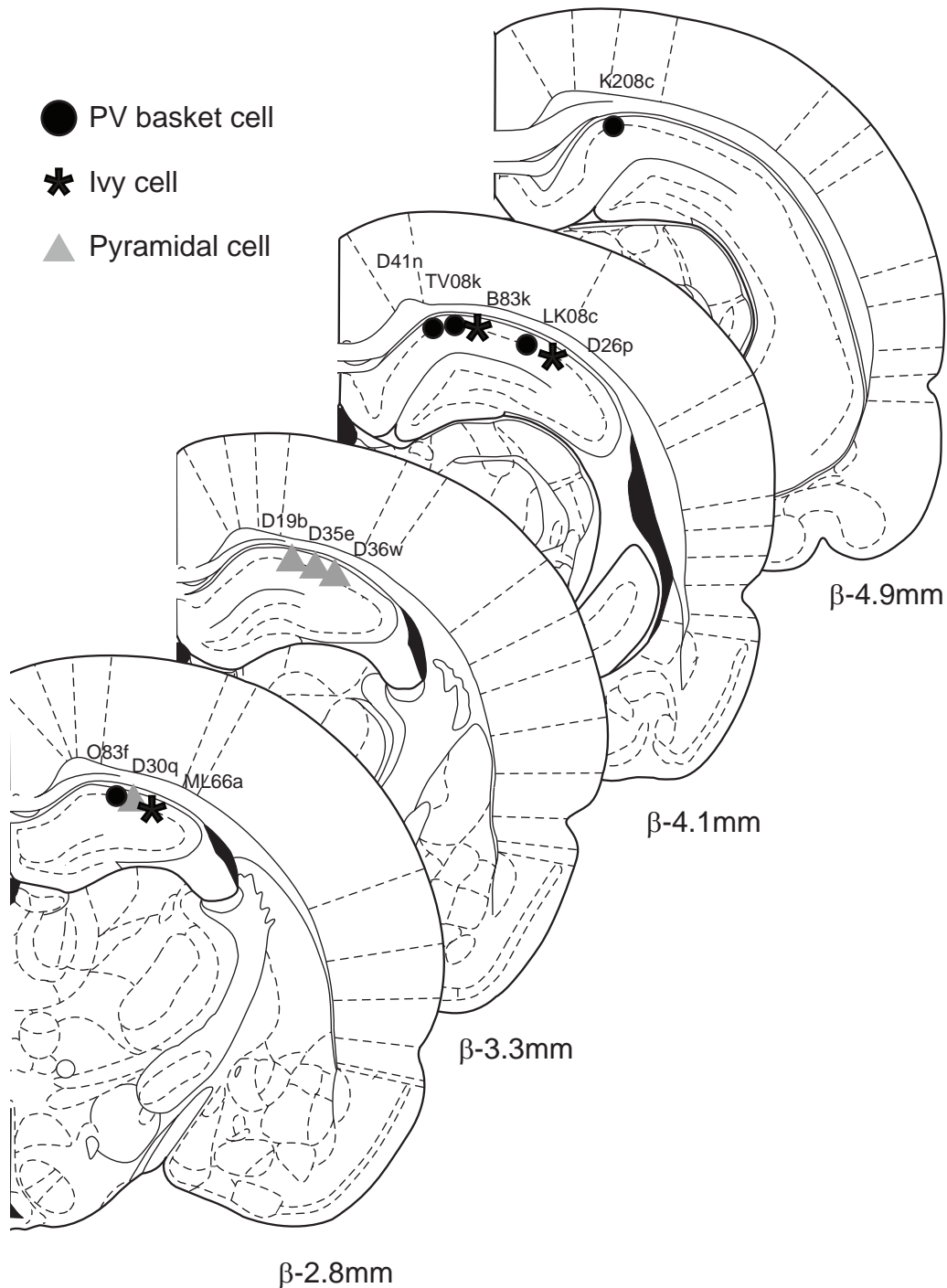


## Behavior-dependent specialization of identified hippocampal interneurons

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### Supplementary Figure 1. Position of recorded cells.

The positions of the recorded and labeled cells together with their individual codes are plotted in the dorsal hippocampus on schematic coronal sections based on the atlas of Paxinos and Watson, 1998.

**Supplementary Table 1. List of primary antibodies**

molecule	host animal	internal ref number	dilution	source	source code	epitope, amino acid residues	stock protein concentration	specificity reference
calbindin	rabbit	989	1:5000	Swant, Bellinzona, Switzerland	CB-38	raised against recombinant rat calbindin D-28k.	unknown	Airaksinen, M.S., et al. <i>Proc. Natl. Acad. Sci.</i> 94, 1488 (1997) - KO test
CCK	guinea pig	1306	1:500, 1:1000	Dr. M. Watanabe, Hokkaido University, Japan	CCK-8	cysteine-tagged CCK-8 (CDYMGWMDF) coupled to keyhole limpet hemocyanin	affinity purified 380µg/ml	labeling pattern as published with other antibodies
	rabbit	1090	1:500	Dr. M. Watanabe, Hokkaido University, Japan	pro-CCK	cysteine-tagged C-terminal 9 aa of pro-CCK (CSAEDYEYPS) coupled to keyhole limpet hemocyanin	affinity purified 350µg/ml	labeling pattern as published with other antibodies
GABAAR $\alpha$ 1 subunit	guinea pig	1380	1:200	Prof. R. Shigemoto, Div. Cerebral Structure, Nat. Inst. Physiological Sciences, Okazaki, Japan. Purified by Prof W. Sieghart, Brain Res. Inst., Vienna, Austria.	-	fusion protein, mouse $\alpha$ 1 subunit, aa 328-382	affinity purified antibody	Kaufmann, W.A., et al. <i>J. Comp. Neurol.</i> 515, 215 (2009); Western blot - Cell expression test
	rabbit	946	1:500, 1:1500	Prof. W. Sieghart, Brain Res. Inst., Vienna, Austria	P16	rat sequence, 1-9	406µg/ml	Zezula, J. & Sieghart, W. <i>FEBS Lett.</i> 284, 15 (1991); Baude, A. et al. <i>Cereb. Cortex</i> 17, 2094 (2007) - KO test
	rabbit	1389	1:250	Prof. W. Sieghart, Brain Res. Inst., Vienna, Austria	19-8	rat sequence, 1-9	272µg/ml	Zezula, J. & Sieghart, W. <i>FEBS Lett.</i> 284, 15 (1991); Baude, A. et al. <i>Cereb. Cortex</i> 17, 2094 (2007).
ErbB4	mouse	1353	1:1000, 1:500, 1:100	Thermo Scientific	MS-270-P0	extracellular fragment of recombinant human c-erbB-4/HER-4 oncoprotein	200µg/ml	Neddens, J., et al. <i>Biol. Psychiatry</i> 70, 636 (2011); Vullhorst, D., et al. <i>J. Neurosci.</i> 29, 12255 (2009); Chen, X., et al. <i>J. Biol. Chem.</i> 271, 7620 (1996) - KO test
GABAAR $\delta$ subunit	rabbit	912	1:250	Prof. W. Sieghart, Brain Res. Inst., Vienna, Austria	-	rat sequence, aa 1-44	449µg/ml	Jones, A., et al. <i>J. Neurosci.</i> 17, 1350 (1997); Tretter, V., et al. <i>J. Biol. Chem.</i> 276, 10532 (2001) - KO test
	rabbit	913	1:250	Prof. W. Sieghart, Brain Res. Inst., Vienna, Austria	-	rat sequence, aa 1-44	563µg/ml	Jones, A., et al. <i>J. Neurosci.</i> 17, 1350 (1997); Tretter, V., et al. <i>J. Biol. Chem.</i> 276, 10532 (2001) - KO test
	rabbit	1342	1:1000	Prof. W. Sieghart, Brain Res. Inst., Vienna, Austria	-	mixture of two affinity purified antibodies, rat sequences, aa 1-44 and aa 318-400	unknown	Jones, A., et al. <i>J. Neurosci.</i> 17, 1350 (1997).
NK1R	guinea pig	991	1:250	Millipore, Chemicon, Temecula, CA, USA	AB5800	synthetic peptide, amino acids 393-407 from rat Substance P Receptor	unknown	Le Brun, I., et al. <i>Neurosci.</i> 152, 56 (2008).
	rabbit	1301	1:500, 1:1000	Millipore, Chemicon, Temecula, CA, USA	AB5060	synthetic peptide that corresponds to a 23 amino acid sequence (385-407) of the COOH terminus of the rat Substance P receptor (NK-1)	unknown	labeling pattern as published with other antibodies - Baker, S.J., et al. <i>Brain Res. Mol. Brain Res.</i> 111, 136 (2003).
nNOS	mouse	1167	1:500, 1:1000	Sigma	N2280 Lot 081K4815	raised to recombinant rat nNOS residues 1-181.	ascites, 35.9 mg/ml	labeling pattern as published with other antibodies
NPY	rabbit	587	1:5000	Peptide Institute, Osaka, Japan	14158-v Lot 864-410804	NPY (human) - bovine thyroglobuline	full serum	RIA-tised against several neuropeptides
	rabbit	1011	1:5000	Diasorin (Immunostar)	Cat No:-22940	NPY coupled to bovine thyroglobulin (with glutaraldehyde)	unknown	labeling pattern as published with other antibodies; absorption tested by manufacturer to 6 other peptides, leaving reactivity intact.
PV	goat	1258	1:1000	Swant, Bellinzona, Switzerland	PVG-214 Lot 3.6	purified rat PV	unknown	characterized by western blot on rodent brain homogenate and labels a single band at ~12kDa (E. Celio, personal communication) (from Constantinople et al., <i>J. Comp. Neurol.</i> 516, 291 (2009))
	guinea pig	1310	1:2000, 1:5000	SYSY Synaptic Systems	195 004	recombinant full length rat parvalbumin	unknown	labeling pattern as published with previous antibodies.
	mouse	922	1:5000	Swant, Bellinzona, Switzerland	235 Lot 10-11 (F)	purified carp PV	unknown	Celio, M.R., et al. <i>Cell Calcium</i> 9, 81 (1988).
	rabbit	835	1:500	Swant, Bellinzona, Switzerland	PV-28 Lot 5.5	purified rat PV	unknown	Kagi, U., et al. <i>J. Biol. Chem.</i> 262, 7314 (1987); Schwaller, B., et al. <i>Am. J. Physiol.</i> 276, C395 (1999) - KO test
reelin	mouse	1112	1:1000	Chemicon	MAB5364 Lot LV1566698	recombinant reelin amino acids 164-496	1mg/ml	de Bergueck, V., et al. <i>J. Neurosci. Methods</i> 82, 17 (1998).
SATB1/2	mouse	1341	1:100	Abcam	ab51502	recombinant fragment C-terminal (human)	0.1mg/ml	Britanova, O., et al. <i>Neuron</i> 57, 378 (2008); Britanova, O., et al. <i>Eur. J. Neurosci.</i> 21, 658 (2005); Nielsen, J.V., et al. <i>Cereb. Cortex</i> 20, 1904 (2010).
somatostatin	mouse	1276	1:200, 1:500	GeneTex Incorporate	GTX71935 cloneSOM-018	monoclonal, somatostatin conjugated to protein carrier	0.14mg/ml	labeling pattern as published with other antibodies
	rat	815	1:500	Chemicon	MAB354	monoclonal, synthetic 1-14 cyclic somatostatin conjugated to bovine thyroglobulin using carbodiimide	1mg/ml	labeling pattern as published with previous antibodies - Kubota, Y., et al. <i>Cereb. Cortex</i> 21, 1803 (2011).
VIP	mouse	1053	1:50000	Dr. G. Ohning, Cure, UCLA, USA	55	monoclonal, raised in mouse against VIP	unknown	Wong, H.C., et al. <i>Hybridoma</i> 15, 133 (1996).