

Table S1: Peptide nomenclature and source references for CAL binding partners.

CAL Binding Partner	Abbn.	Accession # <sup>a</sup>	Identified by (ref.)
Somatostatin Receptor Subtype 5	C-SSR5 <sub>10</sub>	P35346	(1)
Amiloride-Sensitive Cation Channel 3	C-AIC3A <sub>10</sub>	Q9UHC3	(2)
Frizzled 8	C-FRZ8 <sub>10</sub>	Q9H461	(3)
Guanine Nucleotide-Binding Protein G <sub>i</sub> /G <sub>s</sub> /G <sub>o</sub> Subunit $\gamma$ -4 Precursor	C-GBG4 <sub>10</sub>	P50150	This study
Latrophilin 1	C-CL1 <sub>10</sub>	O94910	(4)
Chloride Channel 3 Isoform B	C-ClC3B <sub>10</sub>	P51790-2	(5)
Neuroigin 2	C-NLG2 <sub>10</sub>	Q8NFZ4	(6)
Sidekick 2	C-SDK2 <sub>10</sub>	Q58EX2	(6)
Neuroigin 1	C-NLG1 <sub>10</sub>	Q8N2Q7	(6)
Rhotekin	C-RTKN <sub>10</sub>	Q9BST9	(7)
Frizzled 5	C-FRZ5 <sub>10</sub>	Q13467	(3)
$\beta$ 1-Adrenergic Receptor	C- $\beta$ 1AR <sub>10</sub>	Q5T5Y4	(8)
Ionotropic Glutamate Receptor $\delta$ -2 subunit	C-GluR $\delta$ 2 <sub>10</sub>	Q59FZ1	(9)
Cystic Fibrosis Transmembrane Conductance Regulator	C-CFTR <sub>10</sub>	P13569	(10)
Ionotropic Glutamate Receptor $\delta$ -1 subunit	C-GluR $\delta$ 1 <sub>10</sub>	Q9ULK0	(9)
$\beta$ -catenin	C- $\beta$ CAT <sub>10</sub>	P35222	(7)
N-methyl D-aspartate Receptor Subunit 2A	C-NR2A <sub>10</sub>	Q12879	(11)
Chondroitin Sulfate Proteoglycan 5	C-NGC <sub>10</sub>	O95196	(12)

Peptides were synthesized with an N-terminal Cys, followed by the final 10 C-terminal residues of each of the binding partners shown. <sup>a</sup>SwissProt/TrEMBL accession number.

## REFERENCES:

1. Wente, W., Stroh, T., Beaudet, A., Richter, D., and Kreienkamp, H. J. (2005) Interactions with PDZ domain proteins PIST/GOPC and PDZK1 regulate intracellular sorting of the somatostatin receptor subtype 5, *J Biol Chem* 280, 32419-32425.
2. Hruska-Hageman, A. M., Benson, C. J., Leonard, A. S., Price, M. P., and Welsh, M. J. (2004) PSD-95 and Lin-7b interact with acid-sensing ion channel-3 and have opposite effects on H<sup>+</sup>-gated current, *J Biol Chem* 279, 46962-46968.

3. Yao, R., Maeda, T., Takada, S., and Noda, T. (2001) Identification of a PDZ domain containing Golgi protein, GOPC, as an interaction partner of frizzled, *Biochem Biophys Res Commun* 286, 771-778.
4. Tobaben, S., Sudhof, T. C., and Stahl, B. (2000) The G protein-coupled receptor CL1 interacts directly with proteins of the Shank family, *J Biol Chem* 275, 36204-36210.
5. Gentsch, M., Cui, L., Mengos, A., Chang, X. B., Chen, J. H., and Riordan, J. R. (2003) The PDZ-binding chloride channel CIC-3B localizes to the Golgi and associates with cystic fibrosis transmembrane conductance regulator-interacting PDZ proteins, *J Biol Chem* 278, 6440-6449.
6. Meyer, G., Varoqueaux, F., Neeb, A., Oeschles, M., and Brose, N. (2004) The complexity of PDZ domain-mediated interactions at glutamatergic synapses: a case study on neuroligin, *Neuropharm.* 47, 724-733.
7. Ito, H., Iwamoto, I., Morishita, R., Nozawa, Y., Asano, T., and Nagata, K. (2006) Identification of a PDZ protein, PIST, as a binding partner for Rho effector Rhotekin: biochemical and cell-biological characterization of Rhotekin-PIST interaction, *Biochem J* 397, 389-398.
8. He, J., Bellini, M., Xu, J., Castleberry, A. M., and Hall, R. A. (2004) Interaction with cystic fibrosis transmembrane conductance regulator-associated ligand (CAL) inhibits  $\beta$ -adrenergic receptor surface expression, *J Biol Chem* 279, 50190-50196.
9. Yue, Z., Horton, A., Bravin, M., DeJager, P. L., Selimi, F., and Heintz, N. (2002) A novel protein complex linking the  $\delta 2$  glutamate receptor and autophagy: implications for neurodegeneration in lurcher mice, *Neuron* 35, 921-933.
10. Cheng, J., Moyer, B. D., Milewski, M., Loffing, J., Ikeda, M., Mickle, J. E., Cutting, G. R., Li, M., Stanton, B. A., and Guggino, W. B. (2002) A Golgi-associated PDZ domain protein

modulates cystic fibrosis transmembrane regulator plasma membrane expression, *J. Biol. Chem.* 277, 3520-3529.

11. Cuadra, A. E., Kuo, S. H., Kawasaki, Y., Bredt, D. S., and Chetkovich, D. M. (2004) AMPA receptor synaptic targeting regulated by stargazin interactions with the Golgi-resident PDZ protein nPIST, *J Neurosci* 24, 7491-7502.
12. Hassel, B., Schreff, M., Stube, E. M., Blaich, U., and Schumacher, S. (2003) CALEB/NGC interacts with the Golgi-associated protein PIST, *J Biol Chem* 278, 40136-40143.