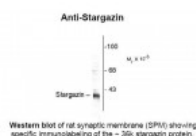




## Stargazin Antibody

CATALOG NUMBER: 50-182



Western blot of rat synaptic membrane (SPM) showing specific immunolabeling of the ~36k stargazin protein.

### Specifications

<b>SPECIES REACTIVITY:</b>	Mouse, Rat
<b>TESTED APPLICATIONS:</b>	WB
<b>APPLICATIONS:</b>	The antibody has been directly tested for reactivity in rat tissue. It is anticipated that the antibody will also work with mouse tissue based on the fact that this species has 100% homology with the amino acid sequence used as antigen.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>PREDICTED MOLECULAR WEIGHT:</b>	36
<b>IMMUNOGEN:</b>	Peptide corresponding to amino acid residues from the C-terminal region of rat stargazin, conjugated to keyhole limpet hemocyanin (KLH).
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Affinity Purified
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	100 uL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per mL BSA and 50% glycerol.
<b>STORAGE CONDITIONS:</b>	Stargazin antibody can be stored at -20°C and is stable at -20°C for at least 1 year.
<b>CLONALITY:</b>	Polyclonal
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	stg, wag, waggler, AW060990, stargazer, stargazin, B230105C07Rik, B930041E13Rik, Stg, Neuronal voltage-gated calcium channel gamma-2 subunit, TARP gamma-2
<b>ACCESSION NO.:</b>	O88602
<b>PROTEIN GI NO.:</b>	6685280
<b>OFFICIAL SYMBOL:</b>	Cacng2

Background

**BACKGROUND:** Stargazin is a member of the transmembrane AMPAR regulatory proteins (TARP) family and is involved in glutamate receptor trafficking. It has been recently demonstrated (Tomita et al., 2005; Priel et al., 2005) that the interaction between stargazin and AMPA receptors is critical for the correct localization of the receptors at the synapse. Phosphorylation of the stargazin protein at Thr 321 by Protein Kinase A regulates its interaction with PSD-95 and synaptic targeting of AMPA receptors (Choi et al., 2002).

**REFERENCES:**

1) Tomita S, Adesnik H, Sekiguchi M, Zhang W, Wada K, Howe JR, Nicoll RA, Brecht DS,(2005) Stargazin modulates AMPA receptor gating and trafficking by distinct domains. Nature 435: 1052-1058.

2) Priel A, Kollek A, Ayalon G, Gillor M, Osten P, Stern-Bach Y. (2005) Stargazin reduces desensitization and slows deactivation of the AMPA-type glutamate receptors. J. Neurosci. 25, 2682–2686.

3) Choi, J, Ko J, Park E, Lee JR, Yoon J, Lim S, Kim E, Phosphorylation of stargazin by protein kinase A regulates its interaction with PSD-95.J Biol Chem. 2002 Apr 5;277(14):12359-63.

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