

### Stargazin Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1124

### **Specification**

## **Stargazin Antibody - Product Information**

Application WB
Primary Accession O88602
Reactivity Rat
Predicted Mouse
Host Rabbit
Clonality polyclonal
Calculated MW 36 KDa

# **Stargazin Antibody - Additional Information**

Gene ID 12300
Gene Name CACNG2

**Other Names** 

Voltage-dependent calcium channel gamma-2 subunit, Neuronal voltage-gated calcium channel gamma-2 subunit, Stargazin, Transmembrane AMPAR regulatory protein gamma-2, TARP gamma-2, Cacng2, Stg

### Target/Specificity

Synthetic peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH.

## **Dilution**

WB~~ 1:1000

### **Format**

Prepared from rabbit serum by affinity purification via chromatography on an affinity column to which the C-terminal peptide used as immunogen was coupled.

### **Antibody Specificity**

Specific for the ~36k stargazin protein. Immunolabeling of the stargazinband is blocked by preadsorption with the peptide used as antigen.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Stargazin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **Shipping**

Blue Ice

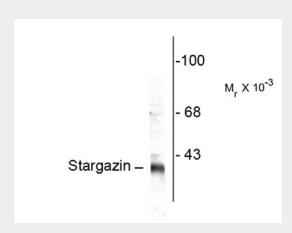


## Stargazin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### Stargazin Antibody - Images



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

# **Stargazin Antibody - Background**

Stargazin is a member of the transmembrane AMPAR regulatory proteins (TARP) family and is involved in glut amate 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).

# **Stargazin Antibody - References**

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

Priel A, Kolleker 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.

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.