

**TARP Gamma2/Stargazin Antibody**  
**TARP Gamma2/Stargazin Antibody, Clone S245-1**  
**Catalog # ASM10255**

## Specification

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### TARP Gamma2/Stargazin Antibody - Product Information

Application	WB
Primary Accession	<a href="#">O71RJ2</a>
Other Accession	<a href="#">NP_445803.1</a>
Host	Mouse
Isotype	IgG2A
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

#### Description

Mouse Anti-Rat TARP Gamma2/Stargazin Monoclonal IgG2A

#### Target/Specificity

Detects ~36kDa. Does not cross-react with TARPGamma3, TARPGamma4 and TARPGamma8.

#### Other Names

CACNG2 Antibody, Calcium channel voltage dependent gamma subunit 2 Antibody, CaV gamma 2 Antibody, Ipr328 Antibody, MGC123981 Antibody, MGC138502 Antibody, MGC138504 Antibody, Voltage-dependent calcium channel gamma-2 subunit Antibody, Neuronal voltage-gated calcium channel gamma-2 subunit Antibody, Stargazin Antibody, Stg Antibody, Stargazer Antibody, TARP Antibody, TARP gamma-2 Antibody, Transmembrane AMPAR regulatory protein gamma-2 Antibody, AW060990 Antibody, B230105C07Rik Antibody, B930041E13Rik Antibody, Wag Antibody, Wagglar Antibody

#### Immunogen

Fusion protein amino acids 203-323 (Cytoplasmic C-terminus) of rat TARPGamma2

#### Purification

Protein G Purified

Storage -20°C

#### Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature

Blue Ice or 4°C

#### Certificate of Analysis

1 µg/ml of SMC-421 was sufficient for detection of TARP Gamma2/ Stargazin in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

#### Cellular Localization

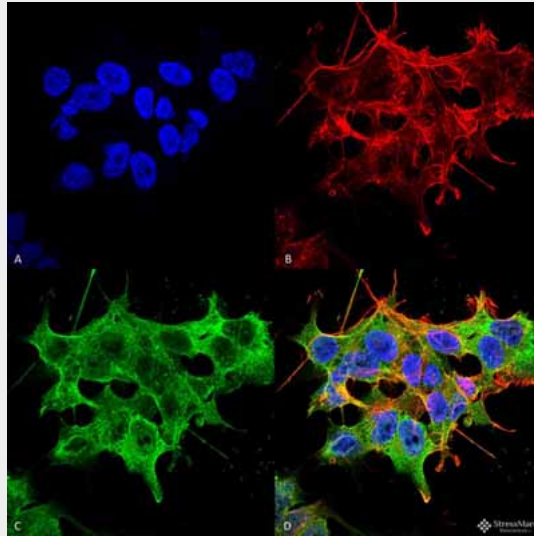
Membrane

### TARP Gamma2/Stargazin Antibody - Protocols

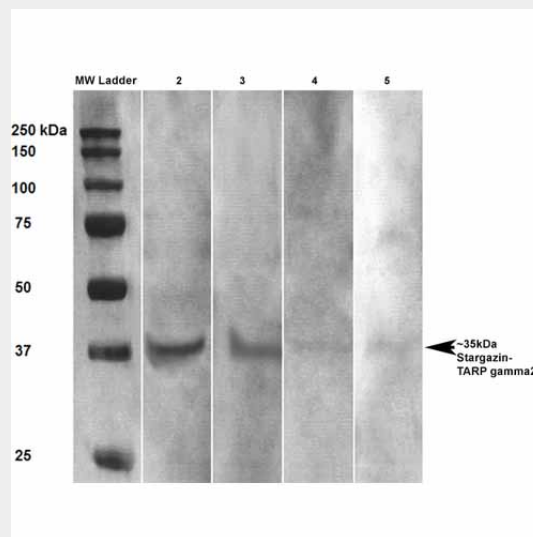
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### TARP Gamma2/Stargazin Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-TARP Gamma2/Stargazin Monoclonal Antibody, Clone S245-1 (ASM10255). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-TARP Gamma2/Stargazin Monoclonal Antibody (ASM10255) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) TARP Gamma2/Stargazin Antibody (D) Composite.



Western Blot analysis of Rat brain lysates showing detection of Stargazin Calcium Channel

protein using Mouse Anti-Stargazin Calcium Channel Monoclonal Antibody, Clone S245-1 (ASM10255). Primary Antibody: Mouse Anti-Stargazin Calcium Channel Monoclonal Antibody (ASM10255) at 1:100, 1:250, 1:500, and 1:1000.

### **TARP Gamma2/Stargazin Antibody - Background**

Stargazin belongs to a group called voltage gated calcium channels (VGCCs) which are present in most excitable cells. Stargazin is thought to stabilize the calcium channel in an inactivated (closed) state. There are five high voltage activated calcium channel types (L, N, P, Q, and R) and one low voltage activated channel type (T). Each of these channels exists as a heteromultimer of  $\alpha 1$ ,  $\beta$ ,  $\alpha 2$ / $\delta$  and  $\gamma$  subunits with the voltage activated calcium channel function carried by the  $\alpha$  subunits. VGCCs exert spatial and temporal control over cellular calcium concentrations and serve to modulate neurotransmitter release, hormone secretion, muscle contraction, electrical activity, cell metabolism and proliferation, gene expression, and neuronal survival.

### **TARP Gamma2/Stargazin Antibody - References**

1. Gill M.B., et al. (2011) J Neurosci. 31(18): 6928-6938.
2. Yu L. (2011) Neuroscience. 178: 13-20.
3. Steinmetz C.C., Turrigiano G.G. (2010) J Neurosci. 30: 14685-14690.
4. Kato. A.S. et al. (2007) J Neurosci. 27: 4969-4977.
5. Letts V.A., et al. (1998) Nat Genet. 19: 340-34