

**TARP Gamma2/4/8 (Stargazin) Antibody**  
**TARP Gamma2/4/8 (Stargazin) Antibody, Clone S245-36**  
**Catalog # ASM10256**

## Specification

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### TARP Gamma2/4/8 (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
Format	RPE

#### Description

Mouse Anti-Rat TARP Gamma2/4/8 (Stargazin) Monoclonal IgG2A

#### Target/Specificity

Detects ~35-55kDa. Does not cross-react with TARPGamma3.

#### 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-422 was sufficient for detection of TARP Gamma2/4/8 in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

#### Cellular Localization

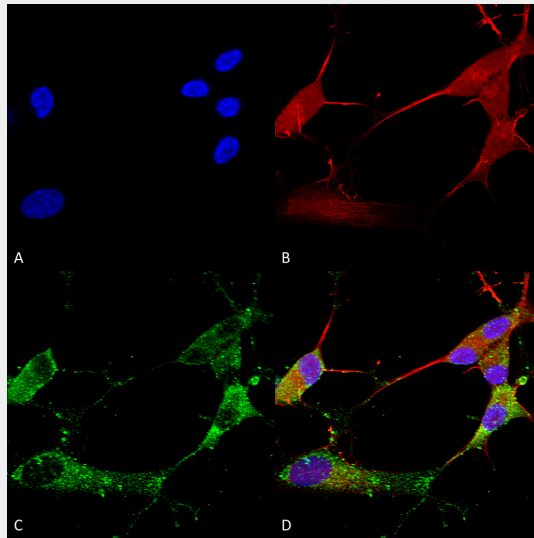
Membrane

### TARP Gamma2/4/8 (Stargazin) Antibody - Protocols

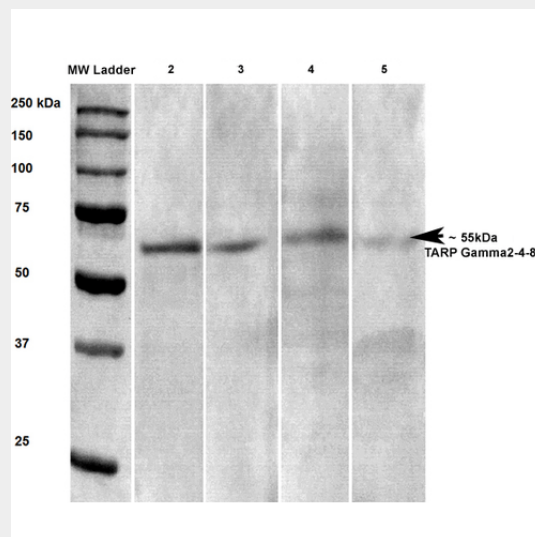
Provided below are standard protocols that you may find useful for product applications.

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

### TARP Gamma2/4/8 (Stargazin) Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-TARP Gamma2/4/8 (Stargazin) Monoclonal Antibody, Clone N245/36 (ASM10256). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-TARP Gamma2/4/8 (Stargazin) Monoclonal Antibody (ASM10256) at 1:100 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) TARP Gamma2/4/8 (Stargazin) Antibody (D) Composite.



Western blot of rat brain lysate showing detection of ~55 kDa TARP Gamma2-4-8 protein using

Anti-Tarp Gamma2-4-8 antibody [N245/36] (ASM10256). Lane 1: MW ladder. Lane 2: Anti-TARP Gamma2-4-8 (1:100). Lane 3: Anti-TARP Gamma2-4-8 (1:250). Lane 4: Anti-TARP Gamma2-4-8 (1:500). Lane 5: Anti-TARP Gamma2-4-8 (1:1000). Load: 20 µg RB lysate per lane. Block: 5% milk + TBST 1hr at RT. Primary antibody: Mouse Anti-TARP Gamma2-4-8 primary antibody [245-36] (ASM10256) incubated for 60 min at RT. Secondary antibody: Goat Anti-Mouse HRP antibody at 1:50 for 60 min at RT. Colour Development: TMB solution for 30 min at RT. Predicted/Observed size: ~ 55 kDa. Other band(s) (faint): ~37kDa, ~40kDa, ~75kDa.

### **TARP Gamma2/4/8 (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  $\alpha 1$ ,  $\beta$ ,  $\alpha 2/d$  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 Gamma2/4/8 (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