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- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# Anti-TARP Gamma2/4/8 (Stargazin) Antibody [S245-36]

Mouse Anti-Rat TARP Gamma2/4/8 (Stargazin) Monoclonal  
IgG2A  
Catalog No. SMC-422



Discovery through partnership | Excellence through quality

## Overview

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### Product Name

TARP Gamma2/4/8 (Stargazin) Antibody

### Description

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

### Species Reactivity

Human, Mouse, Rat

### Applications

WB, ICC/IF

### Antibody Dilution

WB (1:1000), ICC/IF (1:100); optimal dilutions for assays should be determined by the user.

### Host Species

Mouse

### Immunogen Species

Rat

### Immunogen

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

### Concentration

1 mg/ml

### Conjugates

Alkaline Phosphatase, APC, ATTO 390, ATTO 488, ATTO 565, ATTO 594, ATTO 633, ATTO 655, ATTO 680, ATTO 700, Biotin, FITC, HRP, PE/ATTO 594, PerCP, RPE, Streptavidin, Unconjugated

## Properties

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### Storage Buffer

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

### Storage Temperature

-20°C

### Shipping Temperature

Blue Ice or 4°C

## Purification

Protein G Purified

## Clonality

Monoclonal

## Clone Number

S245-36

## Isotype

IgG2a

## Specificity

Detects ~35-55kDa. Does not cross-react with TARP $\gamma$ 3.

## Cite This Product

Mouse Anti-Rat Stargazin Monoclonal, Clone S245-36 (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SMC-422)

## Certificate Of Analysis

1  $\mu$ g/ml of SMC-422 was sufficient for detection of TARP  $\gamma$ 2/4/8 in 20  $\mu$ g of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

## Biological Description

### Alternative Names

CACNG2 Antibody, Calcium channel voltage dependent gamma subunit 2 Antibody, CaV gamma 2 Antibody, lpr328 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

### Research Areas

Calcium Channels, Cell Structure, Ion Channels, Neuroscience, Post-Synaptic Markers, Voltage-Gated Calcium Channels

### Cellular Localization

Membrane

### Accession Number

NP\_445803.1

### Gene ID

84347

### Swiss Prot

Q71RJ2

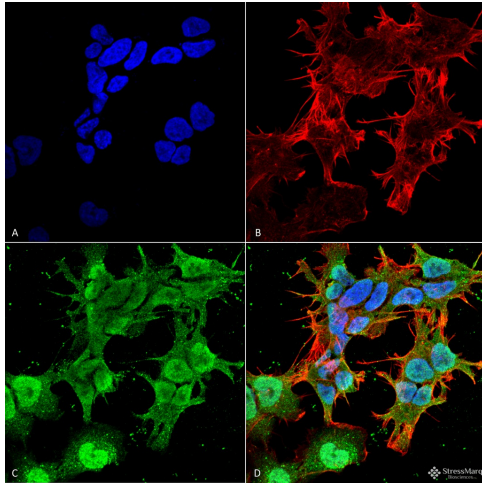
### Scientific Background

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.

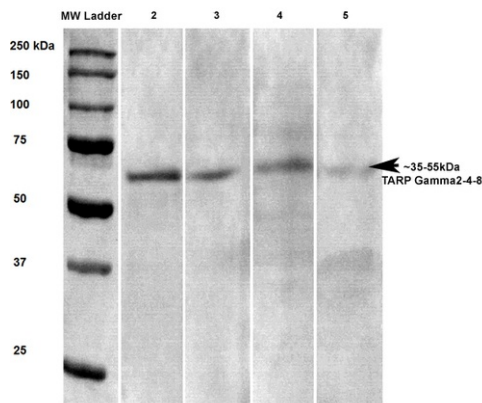
## References

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

## Product Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-TARP Gamma2/4/8 (Stargazin) Monoclonal Antibody, Clone S245-36 (SMC-422). Tissue: Neuroblastoma cell line SK-N-BE. Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-TARP Gamma2/4/8 (Stargazin) Monoclonal Antibody (SMC-422) 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: Cell Membrane, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) TARP Gamma2/4/8 (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 S245-36 (SMC-422). Primary Antibody: Mouse Anti-Stargazin Calcium Channel Monoclonal Antibody (SMC-422) at 1:100, 1:250, 1:500, and 1:1000.

## Product Citations (1)

### Western Blot

#### Coexpressed Auxiliary Subunits Exhibit Distinct Modulatory Profiles on AMPA Receptor Function.

Khodosevich, K. et al. -2014 Neuron. 83(3):601-15.

**PubMed ID:** 25066086 **Reactivity:** Mouse **Applications:** Western Blot

## Reviews

Based on validation through cited publications.



StressMarq Biosciences

