

Kv3.2 Antibody

Kv3.2 Antibody, Clone S410-17 Catalog # ASM10324

Specification

Kv3.2 Antibody - Product Information

Application WB, IHC, ICC
Primary Accession P22462
Other Accession NP_631962.1
Host Mouse

Isotype IgG1
Reactivity Human, Mouse, Rat

Clonality Monoclonal

Description

Mouse Anti-Rat Kv3.2 Monoclonal IgG1

Target/Specificity

Detects ~80-100kDa. Varies due to post-translational modifications.

Other Names

Potassium voltage-gated channel subfamily C member 2 Antibody, Kcnc2 Antibody, KSHIIIA Antibody

Immunogen

Fusion protein amino acids 474-613 (Cytoplasmic C-terminus) of rat Kv3.2a

Purification

Protein G Purified

Storage -20°C

Storage Buffer

PBS pH7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature Blue Ice or 4°C

Certificate of Analysis

A 1:100 dilution of SMC-492 was sufficient for detection of Kv3.2 in 20 μ g of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

Cell Membrane

Kv3.2 Antibody - Protocols

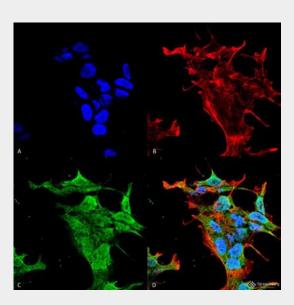
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

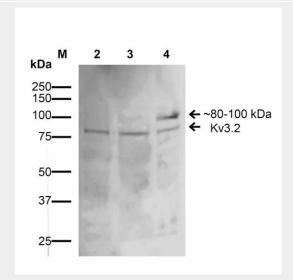


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Kv3.2 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Kv3.2 Monoclonal Antibody, Clone S410-17 (ASM10324). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Kv3.2 Monoclonal Antibody (ASM10324) 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. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Kv3.2 Antibody (D) Composite.



Western Blot analysis of Mouse, Rat Brain showing detection of $\sim 80\text{-}100$ kDa Kv3.2 protein using Mouse Anti-Kv3.2 Monoclonal Antibody, Clone S410-17 (ASM10324). Lane 1: MW Ladder. Lane 2: Mouse Brain. Lane 3: Rat Brain Membrane. Lane 4: Rat Brain. Load: 20 μ g. Block: 2% GE Healthcare Blocker for 1 hour at RT. Primary Antibody: Mouse Anti-Kv3.2 Monoclonal Antibody (ASM10324) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at



1:200 for 1 hour at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: \sim 80-100 kDa. Other Band(s): \sim 30 kDa for Rat Brain .

Kv3.2 Antibody - Background

Kv3.2, a member of the KCNC2 gene family, belongs to a group of potassium channels that contribute to the maintenance of cell volume, membrane potential, neuronal excitability and the secretion of transmitters, salt and hormones. Kv3.2 are predominantly expressed in neurons that fire at high frequencies, and in the fast spiking GABAergic interneurons of the neocortex, hippocampus, and caudate nucleus (1-3). They specifically functioning as a delayed rectifier activated by large membrane depolarizations (2, 4).

Kv3.2 Antibody - References

- 1. Kolodin Y.O. (2008) http://ykolodin.50webs.com/
- 2. Rudy B., McBain C.J. (2001) Trends Neurosci. 24(9): 517-526.
- 3. Gutman G.A., et al. (2005) Pharmacol Rev. 57(4): 472-508.
- 4. Rudy B, et al. (1999) Ann. NY Acad. Sci. 868: 304-343.