

Kv3.2 Antibody

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

Specification

Kv3.2 Antibody - Product Information

Application	ICC/IF, WB
Primary Accession	<u>P22462</u>
Other Accession	<u>NP_631962.1</u>
Host	Mouse
Isotype	lgG1
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 Blue Ice or 4°C Temperature Certificate of Analysis A 1:100 dilution of SMC-492 was sufficient for detection of Kv3.2 in 20 µg of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization Cell Membrane



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.



Kv3.2 Antibody - Protocols

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

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

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Western Blot analysis of Mouse, Rat Brain showing detection of ~80-100 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 µg. 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: ~80-100 kDa. Other Band(s): ~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

 Kolodin Y.O. (2008) http://ykolodin.50webs.com/
 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.