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Kv3.1 Antibody
Kv3.1 Antibody, Clone S16B-8
Catalog # ASM10191

Specification

Kv3.1 Antibody - Product Information

Application	**WB, IHC, ICC, AM**
Primary Accession	P25122
Other Accession	NP_036988
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**

Description
Mouse Anti-Rat Kv3.1 Monoclonal IgG1

Target/Specificity
Detects ~110kDa. Weakly reactive in human samples.

Other Names
Krc2 1 Antibody, NGK2 Antibody, KCNC1 Antibody, voltage gated potassium channel subunit Kv3.1 Antibody, Kv4 Antibody

Immunogen
Fusion protein amino acids 437-585 (C-terminus) or rat Kv3.1b

Purification
Protein G Purified

Storage	**-20ºC**

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

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-313 was sufficient for detection of Kv3.1b in 10 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Membrane

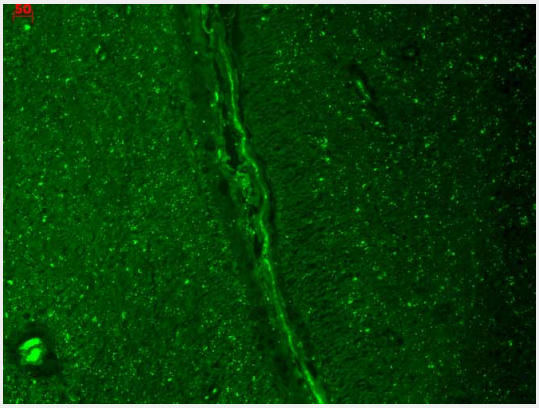
Kv3.1 Antibody - Protocols

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

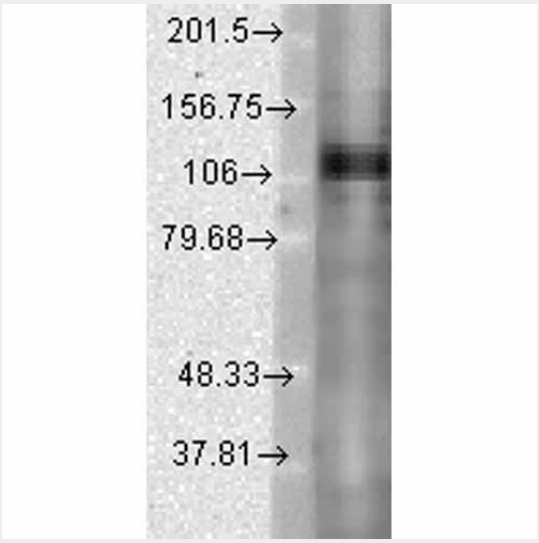
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Kv3.1 Antibody - Images



Immunohistochemistry analysis using Mouse Anti-Kv3.1 Potassium Channel Monoclonal Antibody, Clone S16B-8 (ASM10191). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Kv3.1 Potassium Channel Monoclonal Antibody (ASM10191) at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



Western Blot analysis of Rat brain lysates showing detection of Kv3.1 Potassium Channel protein using Mouse Anti-Kv3.1 Potassium Channel Monoclonal Antibody, Clone S16B-8 (ASM10191). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Kv3.1 Potassium Channel Monoclonal Antibody (ASM10191) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

Kv3.1 Antibody - Background

Potassium voltage-gated channel, Shaw-related subfamily, member 1, also known as KCNC1 or Kv3.1, is a human gene. The Shaker gene family of Drosophila encodes components of voltage-gated potassium channels and is comprised of four subfamilies. Based on sequence similarity, this gene is similar to one of these subfamilies, namely the Shaw subfamily (1). The protein encoded by this gene belongs to the delayed rectifier class of channel proteins and is an

integral membrane protein that mediates the voltage-dependent potassium ion permeability of excitable membranes. Kv3.1b has been extensively tested in the auditory regions of mammals, and the decline of Kv3.1b expression appears to correlate with the functional decline in the medial olivocochlear efferent system (2). Other research shows potential for Kv3.1b channels to be oxygen sensors (3).

Kv3.1 Antibody - References

1. Xu M., et al. (2007) J. Neuroscience. 27(51): 14158-14170.
2. Zettel M.L., Zhu X., O'Neill W.E., Frisina R.D. (2007) J Assoc Res Otolaryngol. 8(2): 280-293.
3. Osipenko O.N., Tate R.J. and Gurney A.M. (2000) Circ Res. 86(5): 534-540.