

Kv3.4 Antibody

Kv3.4 Antibody, Clone S72-16 Catalog # ASM10211

Specification

Kv3.4 Antibody - Product Information

Application ICC/IF, WB, IHC

Primary Accession <u>Q63734</u>

Other Accession NP_001116248.1

Host Mouse Isotype IgG1

Reactivity Human, Mouse, Rat

Clonality Monoclonal

Description

Mouse Anti-Rat Kv3.4 Monoclonal IgG1

Target/Specificity

Detects ~70kDa (100kDa in brain due to glycosylation).

Other Names

Raw3 Antibody, Voltage-gated potassium channel subunit Kv3.4 Antibody, Potassium voltage-gated channel subfamily C member 4 Antibody

Immunogen

Synthetic peptide amino acids 175-192 of rat Kv3.4

Purification

Protein G Purified

Storage -20°C

Storage Buffer

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

Shipping Temperature

Blue Ice or 4ºC

Certificate of Analysis

 $1~\mu g/ml$ of SMC-335 was sufficient for detection of Kv3.4 in $10~\mu g$ of rat brain lysate by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

Membrane

Kv3.4 Antibody - Protocols

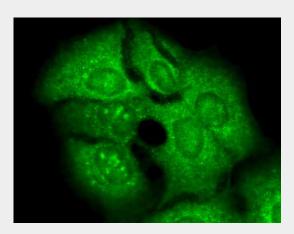
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

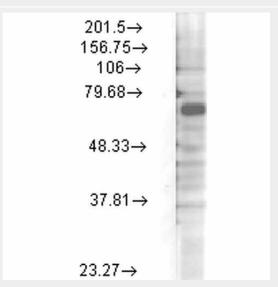


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Kv3.4 Antibody - Images

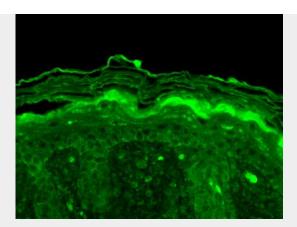


Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Kv3.4 Potassium Channel Monoclonal Antibody, Clone S72-16 (ASM10211). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-Kv3.4 Potassium Channel Monoclonal Antibody (ASM10211) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: All cells positive, stains nucleoli.



Western Blot analysis of Rat brain membrane lysate showing detection of Kv3.4 Potassium Channel protein using Mouse Anti-Kv3.4 Potassium Channel Monoclonal Antibody, Clone S72-16 (ASM10211). Load: 15 μ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Kv3.4 Potassium Channel Monoclonal Antibody (ASM10211) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.





Immunohistochemistry analysis using Mouse Anti-Kv3.4 Potassium Channel Monoclonal Antibody, Clone S72-16 (ASM10211). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Kv3.4 Potassium Channel Monoclonal Antibody (ASM10211) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Hints of filaggrin-like staining.

Kv3.4 Antibody - Background

Kv3.4, a member of the Shaw subfamily, may play important roles in maintaining normal function of the corneal epithelium (1). Kv3.4 is also over-expressed in the early stages of Alzheimer's disease, and therefore represents a novel therapeutic target for this disease (2).

Kv3.4 Antibody - References

- 1. Wang L., Fyffe R.E.W., and Lu L. (2004) Investigative Ophthalmology and Visual Science. 45: 1796-1803.
- 2. Angulo E., et al. (2004) J Neurochem. 91(3): 547-557.