

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

**Specification**

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**Kv3.4 Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">O63734</a>
Other Accession	<a href="#">NP_001116248.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**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 4°C**

**Certificate of Analysis**

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

**Cellular Localization**

Membrane

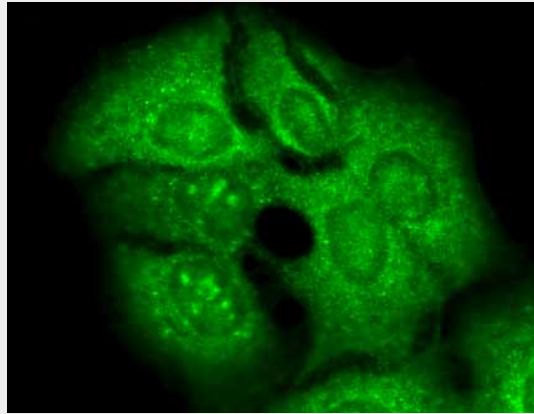
**Kv3.4 Antibody - Protocols**

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

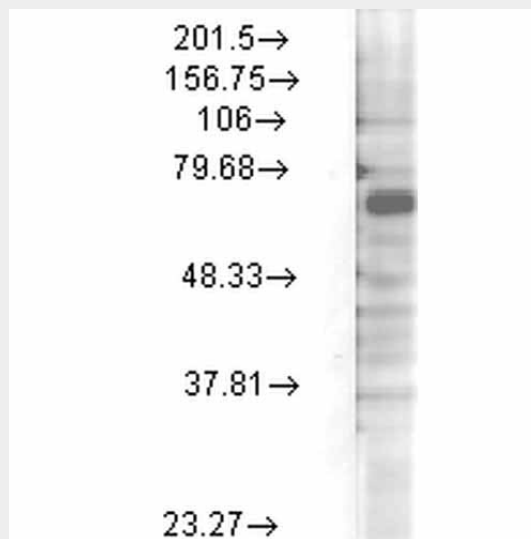
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

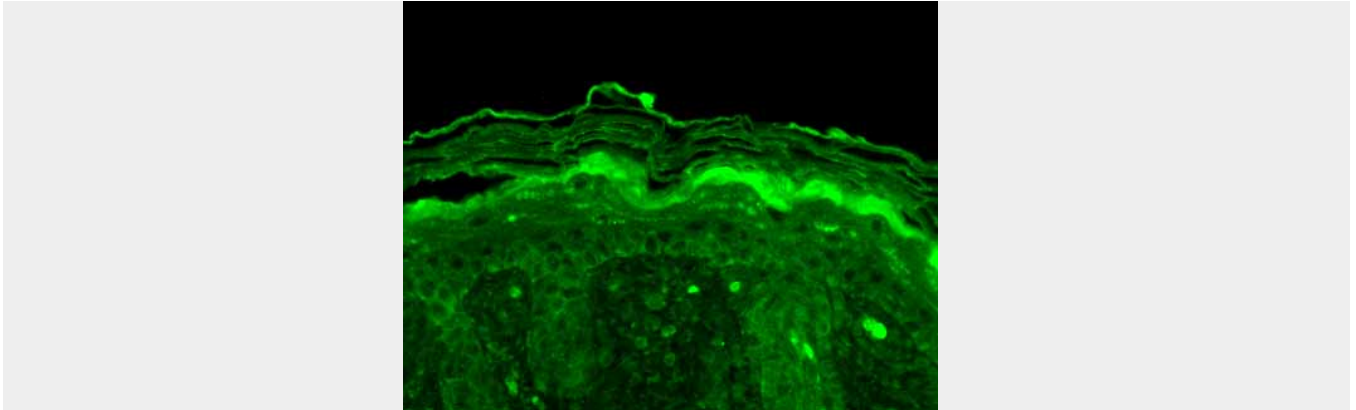
### Kv3.4 Antibody - Images



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 µg. 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.