

**BK Beta 3a Antibody**  
**BK Beta3a Antibody, Clone S40B-18**  
**Catalog # ASM10206****Specification**

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**BK Beta 3a Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">O9NPA1</a>
Other Accession	<a href="#">NP_055222.3</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-Mouse BK Beta3a Monoclonal IgG1

**Target/Specificity**

Detects ~32 kDa. No cross-reactivity against BKBeta1, BKBeta2, BKBeta3b or BKBeta4.

**Other Names**

HBETA3 Antibody, KCNMB2 Antibody, KCNMBL Antibody, BKBeta3 Antibody, KCNMB3 Antibody, Calcium-activated potassium channel subunit beta-3 Antibody, BK channel subunit beta-3 Antibody, BKbeta3 Antibody, Hbeta3 Antibody, Calcium-activated potassium channel Antibody, subfamily M subunit beta-3 Charybdotoxin receptor subunit beta-3 Antibody, K(VCA)beta-3 Antibody, Maxi K channel subunit beta-3 Antibody, Slo-beta-3 Antibody

**Immunogen**

Fusion protein amino acids 1-49 (unique N-terminus) of mouse BKBeta3a

**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-330 was sufficient for detection of BK Beta3a in 10 µg of COS cell (lysate) transiently transfected with BKbeta3a by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

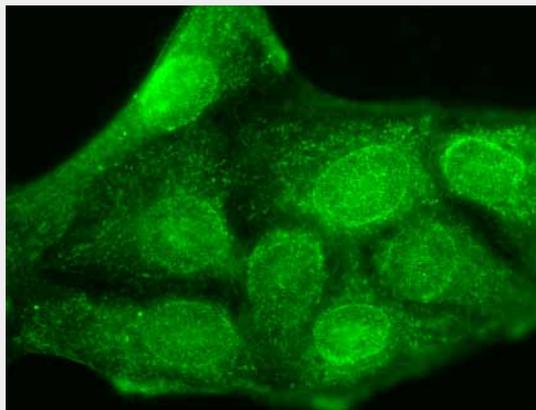
Membrane

**BK Beta 3a Antibody - Protocols**

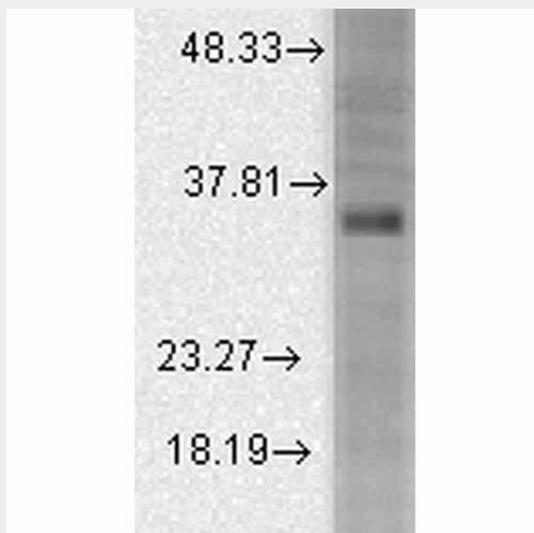
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

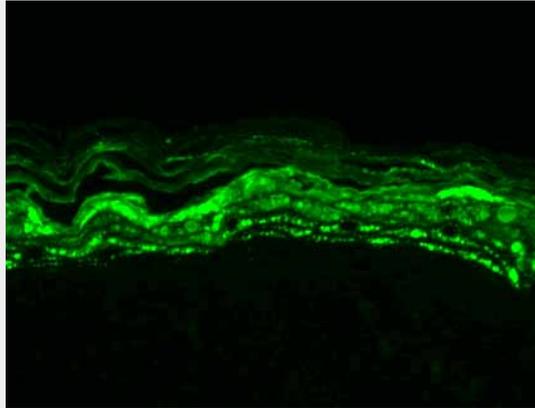
### BK Beta 3a Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-KCNMB3 Potassium Channel Monoclonal Antibody, Clone S40B-18 (ASM10206). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-KCNMB3 Potassium Channel Monoclonal Antibody (ASM10206) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Accumulation at the edges of the cell, ruffling edges.



Western Blot analysis of Rat brain membrane lysate showing detection of KCNMB3 Potassium Channel protein using Mouse Anti-KCNMB3 Potassium Channel Monoclonal Antibody, Clone S40B-18 (ASM10206). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-KCNMB3 Potassium Channel Monoclonal Antibody (ASM10206) 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-KCNMB3 Potassium Channel Monoclonal Antibody, Clone S40B-18 (ASM10206). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-KCNMB3 Potassium Channel Monoclonal Antibody (ASM10206) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Beautiful filaggrin-like staining.

### **BK Beta 3a Antibody - Background**

BK channels contribute to electrical impulses, proper signal transmission of information and regulation of neurotransmitter release (1). A gain of function mutation in the pore-forming alpha subunit of the BK channel was linked to human neurological diseases. Findings suggest that the distribution of the beta subunits in the brain can modulate the BK channels to contribute to the pathophysiology of epilepsy and dyskinesia (2). This has major implications on other physiological processes in tissues other than the brain.

### **BK Beta 3a Antibody - References**

1. Wulf-Johansson H., et al. (2009) Brain Res. 1292: 1-13.
2. Lee U.S., and Cui J. (2009) J Physiol. 587(7): 1481-1489.