

#### **BK Beta 2 Antibody**

BK Beta 2 Antibody, Clone S53-32 Catalog # ASM10207

#### **Specification**

### **BK Beta 2 Antibody - Product Information**

Application IHC, WB
Primary Accession O9CZM9
Other Accession NP\_082507.1
Host Mouse
Isotype IgG1

Reactivity Human, Mouse, Rat

Clonality Monoclonal

Format FITC

Description

Mouse Anti-Mouse BK Beta2 Monoclonal IgG1

## **Target/Specificity**

Detects ~27kDa. No cross-reactivity against BKBeta1, BKBeta3 or BKBeta4.

#### **Other Names**

KCNMB2 Antibody, Calcium-activated potassium channel subunit beta-2 Antibody, BK channel subunit beta-2 Antibody, BKbeta2 Antibody, Calcium-activated potassium channel Antibody, subfamily M subunit beta-2 Antibody, Charybdotoxin receptor subunit beta-2 Antibody, K(VCA)beta-2 Antibody, Maxi K channel subunit beta-2 Antibody, Slo-beta-2 Antibody

#### **Immunogen**

Fusion protein amino acids 1-41 (N-terminus) and 218-235 (C-terminus) of mouse BKBeta2

### **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** 

 $1~\mu g/ml$  of SMC-331 was sufficient for detection of BK Channel beta2 in  $10~\mu g$  of COS-1 cells transiently transfected with KBeta2 lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization** 

Membrane

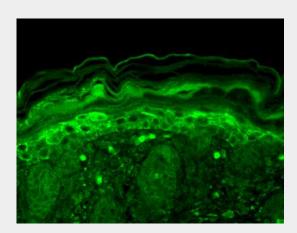
# **BK Beta 2 Antibody - Protocols**

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

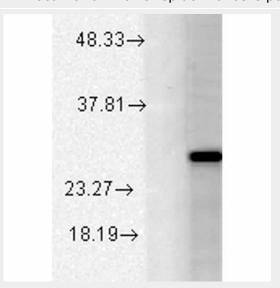


- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### **BK Beta 2 Antibody - Images**

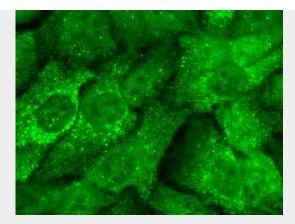


Immunohistochemistry analysis using Mouse Anti-BK Beta2 Potassium Channel Monoclonal Antibody, Clone S53-32 (ASM10207). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-BK Beta2 Potassium Channel Monoclonal Antibody (ASM10207) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Lower epidermal cells positive, but quite dull.



Western Blot analysis of Human Cell line lysates showing detection of BK Beta2 Potassium Channel protein using Mouse Anti-BK Beta2 Potassium Channel Monoclonal Antibody, Clone S53-32 (ASM10207). Load: 15  $\mu$ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-BK Beta2 Potassium Channel Monoclonal Antibody (ASM10207) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.





Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-BK Beta2 Potassium Channel Monoclonal Antibody, Clone S53-32 (ASM10207). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-BK Beta2 Potassium Channel Monoclonal Antibody (ASM10207) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Dottiness and dull.

#### **BK Beta 2 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 2 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.