

KCNMB3 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant KCNMB3.

Catalog # AT2601a

Product Information

Application	WB, E
Primary Accession	Q9NPA1
Other Accession	NM_171828
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5H1
Calculated MW	31604

Additional Information

Gene ID	27094
Other Names	Calcium-activated potassium channel subunit beta-3, BK channel subunit beta-3, BKbeta3, Hbeta3, Calcium-activated potassium channel, subfamily M subunit beta-3, Charybdotoxin receptor subunit beta-3, K(VCA)beta-3, Maxi K channel subunit beta-3, Slo-beta-3, KCNMB3, KCNMB2, KCNMBL
Target/Specificity	KCNMB3 (NP_741979, 82 a.a. ~ 181 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	KCNMB3 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

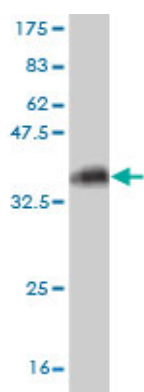
Background

MaxiK channels are large conductance, voltage and calcium-sensitive potassium channels which are fundamental to the control of smooth muscle tone and neuronal excitability. MaxiK channels can be formed by 2 subunits: the pore-forming alpha subunit and the modulatory beta subunit. The protein encoded by this gene is an auxiliary beta subunit which may partially inactivate or slightly decrease the activation time of MaxiK alpha subunit currents. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 22.

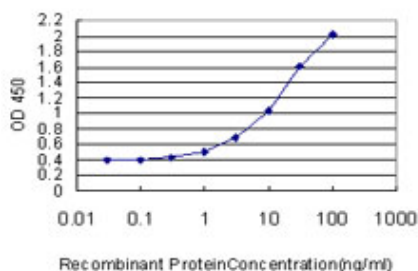
References

{beta} subunit-specific modulations of BK channel function by a mutation associated with epilepsy and dyskinesia. Lee US, et al. J Physiol, 2009 Apr 1. PMID 19204046. Species-specific Differences among KCNMB3 BK beta3 auxiliary subunits: some beta3 N-terminal variants may be primate-specific subunits. Zeng X, et al. J Gen Physiol, 2008 Jul. PMID 18591419. Allelic association of a truncation mutation of the KCNMB3 gene with idiopathic generalized epilepsy. Lorenz S, et al. Am J Med Genet B Neuropsychiatr Genet, 2007 Jan 5. PMID 16958040. Variants of the KCNMB3 regulatory subunit of maxi BK channels affect channel inactivation. Hu S, et al. Physiol Genomics, 2003 Nov 11. PMID 14612589. Redox-sensitive extracellular gates formed by auxiliary beta subunits of calcium-activated potassium channels. Zeng XH, et al. Nat Struct Biol, 2003 Jun. PMID 12740608.

Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .



Detection limit for recombinant GST tagged KCNMB3 is approximately 0.3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.