10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MYO3A Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant MYO3A.
Catalog # AT2959a

Product Information

Application	WB, E
Primary Accession	Q8NEV4
Other Accession	NM_017433
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5A12
Calculated MW	186208

Additional Information

Gene ID	53904
Other Names	Myosin-IIIa, MYO3A
Target/Specificity	MYO3A (NP_059129, 1400 a.a. ~ 1490 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	MYO3A Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

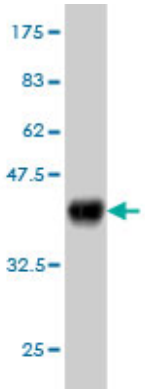
Background

The protein encoded by this gene belongs to the myosin superfamily. Myosins are actin-dependent motor proteins and are categorized into conventional myosins (class II) and unconventional myosins (classes I and III through XV) based on their variable C-terminal cargo-binding domains. Class III myosins, such as this one, have a kinase domain N-terminal to the conserved N-terminal motor domains and are expressed in photoreceptors. The protein encoded by this gene plays an important role in hearing in humans. Three different recessive, loss of function mutations in the encoded protein have been shown to cause nonsyndromic progressive hearing loss. Expression of this gene is highly restricted, with the strongest expression in retina and cochlea.

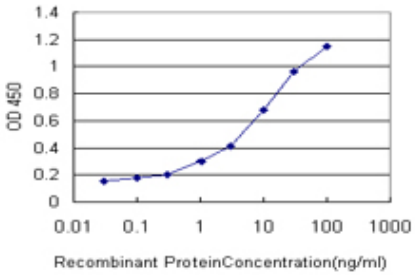
References

Genome-wide association study for colorectal cancer identifies risk polymorphisms in German familial cases and implicates MAPK signalling pathways in disease susceptibility. Lascorz J, et al. Carcinogenesis, 2010 Sep. PMID 20610541.Supervised machine learning and logistic regression identifies novel epistatic risk factors with PTPN22 for rheumatoid arthritis. Briggs FB, et al. Genes Immun, 2010 Apr. PMID 20090771.Polymorphisms in the GAD2 gene-region are associated with susceptibility for unipolar depression and with a risk factor for anxiety disorders. Unschuld PG, et al. Am J Med Genet B Neuropsychiatr Genet, 2009 Dec 5. PMID 19229853.The kinase domain alters the kinetic properties of the myosin IIIA motor. Dos? AC, et al. Biochemistry, 2008 Feb 26. PMID 18229949.Kinetic mechanism of human myosin IIIA. Dos? AC, et al. J Biol Chem, 2007 Jan 5. PMID 17074769.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.64 KDa) .



Detection limit for recombinant GST tagged MYO3A 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'.