

**MYO3A Antibody (monoclonal) (M03)****Mouse monoclonal antibody raised against a partial recombinant MYO3A.****Catalog # AT2959a****Specification**

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**MYO3A Antibody (monoclonal) (M03) - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q8NEV4</a>
Other Accession	<a href="#">NM_017433</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	186208

**MYO3A Antibody (monoclonal) (M03) - Additional Information****Gene ID** 53904**Other Names**

Myosin-IIla, 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

**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.

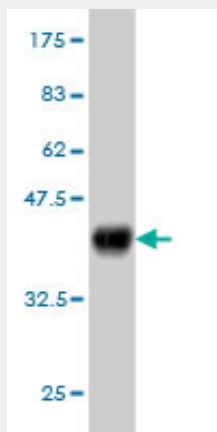
**MYO3A Antibody (monoclonal) (M03) - Protocols**

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

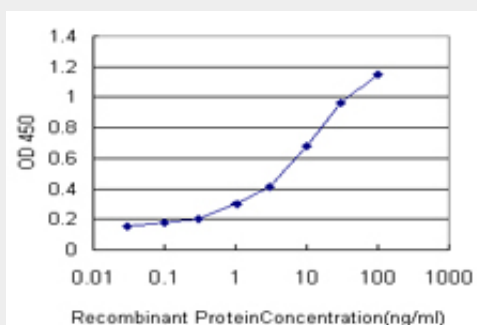
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

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

### MYO3A Antibody (monoclonal) (M03) - Images



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



Detection limit for recombinant GST tagged MYO3A is approximately 0.3 ng/ml as a capture antibody.

### MYO3A Antibody (monoclonal) (M03) - 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.

### MYO3A Antibody (monoclonal) (M03) - 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.