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

MYO3A Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6371b

Specification

MYO3A Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q8NEV4

MYO3A Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 53904

Other Names
Myosin-IIIa, MYO3A

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6371b was selected from the C-term region of human MYO3A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MYO3A Antibody (C-term) Blocking Peptide - Protein Information

Name MYO3A

Function
Probable actin-based motor with a protein kinase activity. Probably plays a role in vision and hearing (PubMed:12032315). Required for normal cochlear hair bundle development and hearing. Plays an important role in the early steps of cochlear hair bundle morphogenesis. Influences the number and lengths of stereocilia to be produced and limits the growth of microvilli within the forming auditory hair bundles thereby contributing to the architecture of the hair bundle, including its staircase pattern. Involved in the elongation of actin in stereocilia tips by transporting the actin regulatory factor ESPN to the plus ends of actin filaments (By similarity).

Cellular Location
Cytoplasm, cytoskeleton. Cytoplasm. Cell projection, filopodium tip. Cell projection, stereocilium {ECO:0000250|UniProtKB:Q8K3H5}. Note=Increased localization at the filodium tip seen in the

presence of MORN4

Tissue Location
Strongest expression in retina, retinal pigment epithelial cells, cochlea and pancreas

MYO3A Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

MYO3A Antibody (C-term) Blocking Peptide - Images

MYO3A Antibody (C-term) Blocking Peptide - Background

MYO3A 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. This protein plays an important role in hearing in humans. Three different recessive loss of function mutations have been shown to cause nonsyndromic progressive hearing loss.

MYO3A Antibody (C-term) Blocking Peptide - References

Dose,A.C., J. Biol. Chem. 282 (1), 216-231 (2007)Kambara,T., J. Biol. Chem. 281 (49), 37291-37301 (2006)