

MYO1A Antibody (Center S291) Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7343c

Specification

MYO1A Antibody (Center S291) - Product Information

Application	FC, WB,E
Primary Accession	<u>09UBC5</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	118401
Antigen Region	276-304

MYO1A Antibody (Center S291) - Additional Information

Gene ID 4640

Other Names

Unconventional myosin-Ia, Brush border myosin I, BBM-I, BBMI, Myosin I heavy chain, MIHC, MYO1A, MYHL

Target/Specificity

This MYO1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 276-304 amino acids from the Central region of human MYO1A.

Dilution FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MYO1A Antibody (Center S291) is for research use only and not for use in diagnostic or therapeutic procedures.

MYO1A Antibody (Center S291) - Protein Information

Name MYO1A



Synonyms MYHL

Function Involved in directing the movement of organelles along actin filaments.

MYO1A Antibody (Center S291) - Protocols

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

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

MYO1A Antibody (Center S291) - Images



Western blot analysis of MYO1A antibody (Center S291) (Cat.#AP7343c) in Jurkat cell line lysates (35ug/lane). MYO1A (arrow) was detected using the purified Pab.



MYO1A Antibody (Center S291) (Cat. #AP7343c) flow cytometry analysis of Jurkat cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MYO1A Antibody (Center S291) - Background



MYO1A belongs to the myosin superfamily. Myosins are molecular motors that, upon interaction with actin filaments, utilize energy from ATP hydrolysis to generate mechanical force. Each myosin has a conserved N-terminal motor domain that contains both ATP-binding and actin-binding sequences. Following the motor domain is a light-chain-binding 'neck' region containing 1-6 copies of a repeat element, the IQ motif, that serves as a binding site for calmodulin or other members of the EF-hand superfamily of calcium-binding proteins. At the C-terminus, each myosin class has a distinct tail domain that serves in dimerization, membrane binding, protein binding, and/or enzymatic activities and targets each myosin to its particular subcellular location. The kidney epithelial cell line, LLC-PK1-CL4 (CL4), forms a well ordered brush border (BB) on its apical surface. Experiments indicate that the brush border population of the protein turns over rapidly, while its head and tail domains interact transiently with the core actin and plasma membrane, respectively. A rapidly exchanging pool of the protein envelops an actin core bundle that, by comparison, is static in structure.

MYO1A Antibody (Center S291) - References

D'Adamo,P., Pinna,M. Hum. Genet. 112 (3), 319-320 (2003) Hoshimaru,M., Fujio,Y. J. Biochem. 106 (3), 455-459 (1989) Durrbach,A., Collins,K. Proc. Natl. Acad. Sci. U.S.A. 93 (14), 7053-7058 (1996)