

**MYO1A Antibody (Center S291) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7343c****Specification**

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**MYO1A Antibody (Center S291) Blocking Peptide - Product Information**Primary Accession [Q9UBC5](#)**MYO1A Antibody (Center S291) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP7343c](/products/AP7343c) was selected from the Center region of human MYO1A. 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.

**MYO1A Antibody (Center S291) Blocking Peptide - Protein Information****Name** MYO1A**Synonyms** MYHL**Function**

Involved in directing the movement of organelles along actin filaments.

**MYO1A Antibody (Center S291) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**MYO1A Antibody (Center S291) Blocking Peptide - Images****MYO1A Antibody (Center S291) Blocking Peptide - 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) Blocking Peptide - 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)