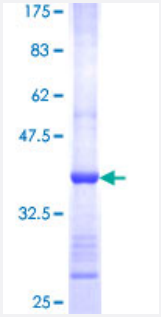
MYO1A (Human) Recombinant Protein (Q01)

Catalog # H00004640-Q01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human MYO1A partial ORF (NP_005370, 944 a.a. - 1043 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	SVTSLKDGLFSLHLSEMSSVGSKGDFLLVSEHVIELLTKMYRAVLDATQRQLTVTVTEKFSVRFKE NSVAVKVVQGPAGGDNSKLRYKKKGSHCLEVTVQ
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
Interspecies Antigen Sequence	Mouse (80); Rat (78)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — MYO1A

Entrez GeneID	4640
GeneBank Accession#	NM_005379
Protein Accession#	NP_005370
Gene Name	MYO1A
Gene Alias	BBMI, DFNA48, MIHC, MYHL
Gene Description	myosin IA
Omim ID	601478 607841
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene 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 encoded 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 encoded by this gene envelops an actin core bundle that, by comparison, is static in structure. [provided by RefSeq
Other Designations	brush border myosin-I|deafness, autosomal dominant 48|myosin I heavy chain|myosin, heavy polypeptide-like (100kD)

Disease

- Tobacco Use Disorder