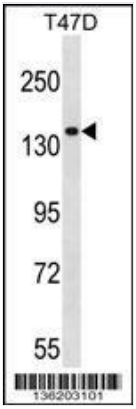
MYO1E Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	MYO1E, Polyclonal Antibody
Full Product Name	MYO1E, NT (MYO1E, MYO1C, Unconventional myosin-Ie, Myosin-Ic, Unconventional myosin 1E) (Azide free) (HRP)
Product Gene Name	anti-MYO1E antibody
Product Synonym Names	MYO1E; MYO1C; Unconventional myosin-Ie; Myosin-Ic; Unconventional myosin 1E
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Horseradish Peroxidase (HRP).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Note: Sodium azide is a potent inhibitor of peroxidase and should not be added to HRP conjugates. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	127,062 Da
OMIM	601479
3D Structure	ModBase 3D Structure for Q12965
Immunogen	MYO1E antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 227-257 amino acids from the N-terminal region of human MYO1E.
Conjugate	HRP
Note	Preservative Free
Product Categories/Family for anti-MYO1E antibody	Antibodies; Myosin
Applications Tested/Suitable for anti-MYO1E antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-MYO1E antibody	WB: 1:100-500 ELISA: 1:1,000 Applications are based on unconjugated antibody.
Related Product Information for anti-MYO1E antibody	Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails are presumed to bind to membranous compartments, which would be moved relative to actin filaments (By similarity).
Product References and Citations for anti-MYO1E antibody	Feeser, E.A., et al. Biochemistry 49(43):9353-9360(2010). Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Krendel, M., et al. FEBS Lett. 581(4):644-650(2007). Wang, A.G., et al. Biochem. Biophys. Res. Commun. 345(3):1022-1032(2006). El Mezgueldi, M., et al. J. Biol. Chem. 277(24):21514-21521(2002).
Other Notes	Small volumes of anti-MYO1E antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

Searchable Terms for MYO1E purchase	MBS6323433 is an antibody targeting MYO1E. Also known as MYO1E, NT (MYO1E, MYO1C, Unconventional myosin-Ie, Myosin-Ic, Unconventional myosin 1E) (Azide free) (HRP). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-MYO1E antibody
MYO1E Antibody (N-term) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the MYO1E antibody detected the MYO1E protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MYO1E. It may not necessarily be applicable to this product.

NCBI GI #	55956916
NCBI GeneID	4643
NCBI Accession #	NP_004989.2
UniProt Primary Accession #	Q12965
UniProt Secondary Accession #	Q14778
UniProt Related Accession #	Q12965
GenBank Nucleotide #	NM_004998.3
NCBI Official Full Name	unconventional myosin-Ie
NCBI Official Synonym Full Names	myosin IE
NCBI Official Symbol	MYO1E
NCBI Official Synonym Symbols	FSGS6; MYO1C; HuncM-IC
UniProt Protein Name	Unconventional myosin-Ie
UniProt Synonym Protein Names	Myosin-Ic; Unconventional myosin 1E
Protein Family	Unconventional myosin
UniProt Gene Name	MYO1E
UniProt Synonym Gene Names	MYO1C
UniProt Entry Name	MYO1E_HUMAN
NCBI Protein Information	unconventional myosin-Ie

NCBI Summary for MYO1E	This gene encodes a member of the nonmuscle class I myosins which are a subgroup of the unconventional myosin protein family. The unconventional myosin proteins function as actin-based molecular motors. Class I myosins are characterized by a head (motor) domain, a regulatory domain and a either a short or long tail domain. Among the class I myosins, this protein is distinguished by a long tail domain that is involved in crosslinking actin filaments. This protein localizes to the cytoplasm and may be involved in intracellular movement and membrane trafficking. Mutations in this gene are the cause of focal segmental glomerulosclerosis-6. This gene has been referred to as myosin IC in the literature but is distinct from the myosin IC gene located on chromosome 17. [provided by RefSeq, Jan 2012]
UniProt Comments for MYO1E	MYO1E: Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails bind to membranous compartments, which are then moved relative to actin filaments. Binds to membranes containing anionic phospholipids via its tail domain. Required for normal morphology of the glomerular basement membrane, normal development of foot processes by kidney podocytes and normal kidney function. In dendritic cells, may control the movement of class II-containing cytoplasmic vesicles along the actin cytoskeleton by connecting them with the actin network via ARL14EP and ARL14. Defects in MYO1E are the cause of focal segmental glomerulosclerosis type 6 (FSGS6). A renal pathology defined by the presence of segmental sclerosis in glomeruli and resulting in proteinuria, reduced glomerular filtration rate and progressive decline in renal function. Renal insufficiency often progresses to end-stage renal disease, a highly morbid state requiring either dialysis therapy or kidney transplantation. FSGS6 is a childhood-onset disorder resulting in nephrotic syndrome, which includes massive proteinuria, hypoalbuminemia, hyperlipidemia, and edema. Protein type: Motor; Motility/polarity/chemotaxis; Actin-binding Chromosomal Location of Human Ortholog: 15q21-q22 Cellular Component: actin cytoskeleton; adherens junction; brush border; clathrin-coated endocytic vesicle; cytoplasm; cytoskeleton; intercellular junction; myosin complex Molecular Function: actin filament binding; ATP binding; ATPase activity, coupled; calmodulin binding; microfilament motor activity; motor activity; phosphoinositide binding; protein binding Biological Process: actin filament-based movement; endocytosis; glomerular basement membrane development; glomerular filtration; in utero embryonic development; nitrogen compound metabolic process; platelet-derived growth factor receptor signaling pathway; post-embryonic hemopoiesis; vasculogenesis Disease: Focal Segmental Glomerulosclerosis 6
Research Articles on MYO1E	**1.** Myo1e is a key component contributing to the functional integrity of podocytes.
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