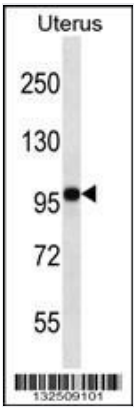
FGD4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	FGD4, Polyclonal Antibody
Full Product Name	FGD4, NT (FGD4, FRABP, ZFYVE6, FYVE, RhoGEF and PH domain-containing protein 4, Actin filament-binding protein frabin, FGD1-related F-actin-binding protein, Zinc finger FYVE domain-containing protein 6)
Product Gene Name	anti-FGD4 antibody
Product Synonym Names	Anti -FGD4, NT (FGD4, FRABP, ZFYVE6, FYVE, RhoGEF and PH domain-containing protein 4, Actin filament-binding protein frabin, FGD1-related F-actin-binding protein, Zinc finger FYVE domain-containing protein 6)
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2, 0.09% sodium azide.
Purity/Purification	Affinity Purified Purified by Protein A affinity chromatography.
Specificity	Human
Preparation and Storage	May be stored at 4 degree C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20 degree C. Aliquots are stable for 12 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	86,626 Da
Chromosome Location	Chromosome: 12; NC_000012.11 (32552518..32798984). Location: 12p11.21
OMIM	609311
3D Structure	ModBase 3D Structure for Q96M96
Immunogen	FGD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 156-186 amino acids from the N-terminal region of human FGD4.
Product Categories/Family for anti-FGD4 antibody	Antibodies; Abs to Transcription Factors; Zinc (Ring) Finger
Applications Tested/Suitable for anti-FGD4 antibody	ELISA (EL/EIA), Western Blot (WB)
Application Notes for anti-FGD4 antibody	Suitable for use in Western Blot, ELISA Dilution: ELISA: 1:1,000 Western Blot: 1:100-500
Related Product Information for anti-FGD4 antibody	This gene encodes a protein that is involved in the regulation of the actin cytoskeleton and cell shape. This protein contains an actin filament-binding domain, which together with its Dbl homology domain and one of its pleckstrin homology domains, can form microspikes. This protein can activate MAPK8 independently of the actin filament-binding domain, and it is also involved in the activation of CDC42 via the exchange of bound GDP for free GTP. The activation of CDC42 also enables this protein to play a role in mediating the cellular invasion of Cryptosporidium parvum, an intracellular parasite that infects the gastrointestinal tract. Mutations in this gene can cause Charcot-Marie-Tooth disease type 4H (CMT4H), a disorder of the peripheral nervous system. [provided by RefSeq].

Other Notes	Small volumes of anti-FGD4 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 FGD4 purchase	MBS6008073 is an antibody targeting FGD4. Also known as FGD4, NT (FGD4, FRABP, ZFYVE6, FYVE, RhoGEF and PH domain-containing protein 4, Actin filament-binding protein frabin, FGD1-related F-actin-binding protein, Zinc finger FYVE domain-containing protein 6). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-FGD4 antibody
FGD4 Antibody (N-term) western blot analysis in human normal Uterus tissue lysates (35ug/lane).This demonstrates the FGD4 antibody detected the FGD4 protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for FGD4. It may not necessarily be applicable to this product.

NCBI GI #	198041928
NCBI GeneID	121512
NCBI Accession #	NP_640334.2
UniProt Primary Accession #	Q96M96
UniProt Secondary Accession #	Q6ULS2; Q8TCP6
UniProt Related Accession #	Q96M96
GenBank Nucleotide #	NM_139241.2
NCBI Official Full Name	FYVE, RhoGEF and PH domain-containing protein 4
NCBI Official Synonym Full Names	FYVE, RhoGEF and PH domain containing 4
NCBI Official Symbol	FGD4
NCBI Official Synonym Symbols	CMT4H; FRABP; ZFYVE6
UniProt Protein Name	FYVE, RhoGEF and PH domain-containing protein 4
UniProt Synonym Protein Names	Actin filament-binding protein frabin; FGD1-related F-actin-binding protein; Zinc finger FYVE domain-containing protein 6
Protein Family	FYVE, RhoGEF and PH domain-containing protein
UniProt Gene Name	FGD4
UniProt Synonym Gene Names	FRABP; ZFYVE6
UniProt Entry Name	FGD4_HUMAN
NCBI Protein Information	FYVE, RhoGEF and PH domain-containing protein 4; FGD1 family, member 4; FGD1-related F-actin-binding protein; actin-filament binding protein frabin; zinc finger FYVE domain-containing protein 6

NCBI Summary for FGD4	This gene encodes a protein that is involved in the regulation of the actin cytoskeleton and cell shape. This protein contains an actin filament-binding domain, which together with its Dbl homology domain and one of its pleckstrin homology domains, can form microspikes. This protein can activate MAPK8 independently of the actin filament-binding domain, and it is also involved in the activation of CDC42 via the exchange of bound GDP for free GTP. The activation of CDC42 also enables this protein to play a role in mediating the cellular invasion of Cryptosporidium parvum, an intracellular parasite that infects the gastrointestinal tract. Mutations in this gene can cause Charcot-Marie-Tooth disease type 4H (CMT4H), a disorder of the peripheral nervous system. [provided by RefSeq, Oct 2008]
UniProt Comments for FGD4	FGD4: Activates CDC42, a member of the Ras-like family of Rho- and Rac proteins, by exchanging bound GDP for free GTP. Plays a role in regulating the actin cytoskeleton and cell shape. Activates MAPK8. Defects in FGD4 are the cause of Charcot-Marie-Tooth disease type 4H (CMT4H); also known as Charcot-Marie- Tooth disease neuropathy type 4H. CMT4H is a recessive demyelinating form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot- Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy and primary peripheral axonal neuropathy. Demyelinating CMT neuropathies are characterized by severely reduced nerve conduction velocities (less than 38 m/sec), segmental demyelination and remyelination with onion bulb formations on nerve biopsy, slowly progressive distal muscle atrophy and weakness, absent deep tendon reflexes, and hollow feet. By convention, autosomal recessive forms of demyelinating Charcot-Marie-Tooth disease are designated CMT4. 3 isoforms of the human protein are produced by alternative splicing. Protein type: GEFs, Rac/Rho; GEFs Chromosomal Location of Human Ortholog: 12p11.21 Cellular Component: ruffle; Golgi apparatus; lamellipodium; cytoplasm; cytosol; filopodium; actin cytoskeleton Molecular Function: small GTPase binding; Rho guanyl-nucleotide exchange factor activity; guanyl-nucleotide exchange factor activity; metal ion binding; actin binding Biological Process: lamellipodium biogenesis; regulation of cell shape; regulation of small GTPase mediated signal transduction; filopodium formation; nerve growth factor receptor signaling pathway; positive regulation of apoptosis; small GTPase mediated signal transduction; microspike biogenesis; cytoskeleton organization and biogenesis; actin cytoskeleton organization and biogenesis; positive regulation of GTPase activity Disease: Charcot-marie-tooth Disease, Type 4h
Research Articles on FGD4	**1.** A single nucleotide polymorphism in FGD4 was associated with the onset of paclitaxel-induced sensory peripheral neuropathy.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.