CAPN6 Human Recombinant Protein

PRODUCT OVERVIEW

Product Name	CAPN6, Recombinant Protein
Full Product Name	Recombinant Human CAPN6
Product Gene Name	CAPN6 recombinant protein
Product Synonym Names	calpain 6; Calpain like protease X linked; Calpamodulin; CalpM; CANPX; CAPN6; CAPNX
Host	E coli
Form/Format	Lyophilized from a 0.2 um filtered solution in 10 mM Hepes, 500 mM NaCl with 5% trehalose, pH7.4
Purity/Purification	Greater than 80% as determined by SDS-PAGE
Preparation and Storage	The lyophilized protein is stable at -20 degree C for up to 1 year, the protein solution can be stored at 2-8 degree C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing 0.1% BSA (make sure BSA will NOT interfere with your experiment) and store in working aliquots at -20 degree C to -80 degree C for 6 months. Avoid repeated freeze/thaw cycle.
Molecular Weight	641
Sequence Positions	403-641
OMIM	300146
3D Structure	ModBase 3D Structure for Q9Y6Q1
Species	Human
Tag	N-terminal His-IF2DI
Reconstitution	Centrifuge the vial prior to opening, reconstitute in sterile distilled water or buffer of interest to concentration of 0.1-1mg/ml by gently pipetting 2-3 times, don't vortex
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for CAPN6 recombinant protein	Western Blot (WB), ELISA (EIA)
Related Product Information for CAPN6 recombinant protein	MBS7617075 is a recombinant protein targeting CAPN6. Also known as Recombinant Human CAPN6. Host: E coli.
Other Notes	Small volumes of CAPN6 recombinant protein 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.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CAPN6. It may not necessarily be applicable to this product.

NCBI GI #	13959315
NCBI GeneID	827
NCBI Accession #	Q9Y6Q1.2
UniProt Primary Accession #	Q9Y6Q1
UniProt Secondary Accession #	Q9UEQ1; Q9UJA8; D3DUY7

UniProt Related Accession #	Q9Y6Q1
NCBI Official Full Name	Calpain-6
NCBI Official Synonym Full Names	calpain 6
NCBI Official Symbol	CAPN6
NCBI Official Synonym Symbols	CANPX; CAPNX; CalpM; DJ914P14.1
UniProt Protein Name	Calpain-6
UniProt Synonym Protein Names	Calpain-like protease X-linked; Calpamodulin; CalpM
Protein Family	Calpain
UniProt Gene Name	CAPN6
UniProt Synonym Gene Names	CALPM; CANPX; CalpM
UniProt Entry Name	CAN6_HUMAN
NCBI Protein Information	calpain-6; calpamodulin; calpain-like protease X-linked
NCBI Summary for CAPN6	Calpains are ubiquitous, well-conserved family of calcium-dependent, cysteine proteases. The calpain proteins are heterodimers consisting of an invariant small subunit and variable large subunits. The large subunit possesses a cysteine protease domain, and both subunits possess calcium-binding domains. Calpains have been implicated in neurodegenerative processes, as their activation can be triggered by calcium influx and oxidative stress. The protein encoded by this gene is highly expressed in the placenta. Its C-terminal region lacks any homology to the calmodulin-like domain of other calpains. The protein lacks critical active site residues and thus is suggested to be proteolytically inactive. The protein may play a role in tumor formation by inhibiting apoptosis and promoting angiogenesis. [provided by RefSeq, Nov 2009]
UniProt Comments for CAPN6	CAPN6: Microtubule-stabilizing protein that may be involved in the regulation of microtubule dynamics and cytoskeletal organization. May act as a regulator of RAC1 activity through interaction with ARHGEF2 to control lamellipodial formation and cell mobility. Does not seem to have protease activity as it has lost the active site residues. Belongs to the peptidase C2 family. Chromosomal Location of Human Ortholog: Xq23 Cellular Component: spindle microtubule; perinuclear region of cytoplasm Molecular Function: microtubule binding; calcium-dependent cysteine-type endopeptidase activity Biological Process: proteolysis; microtubule bundle formation; regulation of cytoskeleton organization and biogenesis
Research Articles on CAPN6	**1.** syndecan-2 exerts its pro-apoptotic function through modulation of the endothelin-1/NFkappaB signaling and through downregulation of calpain-6.
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