

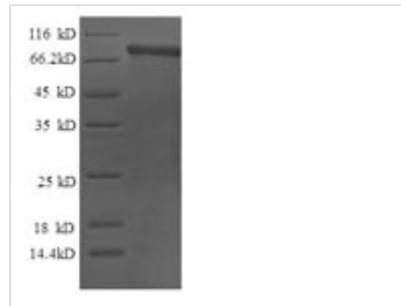


Recombinant Human Calpain-2 catalytic subunit (CAPN2)

Product Code	CSB-EP004496HU
Relevance	Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. Proteolytically cleaves MYOC at 'Arg-226'.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P17655
Alias	Calcium-activated neutral proteinase 2 ;CANP 2;Calpain M-typeCalpain large polypeptide L2;Calpain-2 large subunitMillimolar-calpain ;M-calpain
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SHDRAIKYLNQDYEARNECLEAGTLFQDPSFPAIPASALGFKELGPYSSKTRGI EWKRPTEICADPQFIIGGATRTRDQCQALGDCWLLAAIASLTLNEEILARVVPLN QSFQENYAGIFHFQFWQYGEWVEVVDDRLPTKDGELLFVHSAEGSEFWSAL LEKAYAKINGCYEALSGGATTEGFEDFTGGIAEWYELKKPPPPLFKIIQKALQK GSLGCSIDITSAADSEAITFQKLVKGHAYSVTGAEVEVSNGLQKLIRIRNPWG EVEWTGRWVNDNCPSWNTIDPEERERLRRHEDGEFVMSFSDFLRHYSRLEI CNLTPDTLTSPTYKKWKLTKMDGNWRRGSTAGGCRNYPNTFWMNPQYLIK EEDEDEEDGESGCTFLVGLIQKRRRQRKMGEDMHTIGFGIYEVPEELSGQ TNIHLSKNFFLTNRARERSDTFINLREVLNRFKLPPGEYILVPSTFEPNKDGD IRVFSEKKADYQAVDDEIEANLEEFDISDDIDDGFRRLFAQLAGEDAEISAFEL QTILRRVLAKRQDIKSDGFSIETCKIMVDMMLSDGSGKLGKLFYILWTKIQKYQ KIYREIDVDRSGTMNSYEMRKALEEAGFKMPCQLHQVIVARFADDQLIIDFDNF VRCLVRLETFLKIFKQLDPENTGTIELDLISWLCFSVL
Research Area	Cancer
Source	E.coli
Target Names	CAPN2
Expression Region	20-700aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	82.1kDa
Protein Length	Full Length of Mature Protein



Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Calpain-2 catalytic subunit (CAPN2) CSB-EP004496HU is a recombinant full length of mature protein carrying a 6xHis-tag at the N-terminus. This protein containing amino acid 20-700 of human CAPN2 was expressed in E.coli. It migrated to a band of 85-90 kDa on the reducing SDS-PAGE gel. Its purity was measured by up to 90%. The recombinant CAPN2 protein may be used as an immunogen for antibody production or in the studies of calpain-2-related cancers. In-stock CAPN2 proteins are available.

CAPN2, a large catalytic subunit, makes up the m-calpain with a small regulatory subunit CAPNS1. m-Calpain activation limits the extent of long-term potentiation (LTP) and is neurodegenerative. Extrasynaptic NMDAR (N-methyl-D-aspartate receptor) activation induces m-calpain activation, resulting in STEP degradation and subsequent activation of the p38 prodeath pathway, ultimately leading to neurotoxicity.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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