

CAPN2 Protein, Human (His)

Cat. No.:	HY-P72115
Synonyms:	Calcium-activated neutral proteinase 2; Calpain M-type; Millimolar-calpain; CAPN2; CANPL2
Species:	Human
Source:	E. coli
Accession:	P17655 (S20-L700)
Gene ID:	824
Molecular Weight:	Approximately 82.1 kDa

PROPERTIES

AA Sequence

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SHDRAIKYLN   QDYEARNEC   LEAGTLFQDP   SFPAIPALG
FKELGPYSSK   TRGIEWKRPT   EICADPQFII   GGATRTRDICQ
GALGDCWLLA   AIASLTLNEE   ILARVVPLNQ   SFQENYAGIF
HFQFWQYGEW   VEVVDDRLP   TKDGELLFVH   SAEGSEFWSA
LLEKAYAKIN   GCYEALSGGA   TTEGFEDFTG   GIAEWEYELKK
PPPNLFKIIQ   KALQKGSLLG   CSIDITSAAD   SEAITFQKLV
KGHAYSVTGA   EEVESNGSLQ   KLIRIRNPWG   EVEWTGRWND
NCPSWNTIDP   EERERLTRRH   EDGEFWMSFS   DFLRHYSRLE
ICNLTPTDTLT   SDTYKKWKL   KMDGNWRRGS   TAGGCRNYPN
TFWMNPQYLI   KLEEEDEDEE   DGESGCTFLV   GLIQKHRRRQ
RKMGEDMHTI   GFGIYEVPEE   LSGQTNIHLS   KNFFLTNRAR
ERSDTFINLR   EVLNRFKLPP   GEYILVPSTF   EPNKDGDFCI
RVFSEKKADY   QAVDDEIEAN   LEEFDISEDD   IDDGFRRLFA
QLAGEDAEIS   AFELQTLRR   VLAKRQDIKS   DGFSIETCKI
MVDMLDSDGS   GKLGLKEFYI   LWTKIQKYQK   IYREIDVDRS
GTMNSYEMRK   ALEEAGFKMP   CQLHQVIVAR   FADDQLIIDF
DNFVRCLVRL   ETLFKIFKQL   DPENTGTIEL   DLISWLCFSV
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Biological Activity The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Appearance Lyophilized powder.

Formulation Lyophilized from a 0.2 µm solution of 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0.

Endotoxin Level <1 EU/µg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O.

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION**Background**

CAPN2, a calcium-regulated non-lysosomal thiol-protease, serves as a pivotal enzyme in the limited proteolysis of substrates implicated in cytoskeletal remodeling and signal transduction. Operating in a calcium-dependent manner, CAPN2 catalyzes targeted proteolysis, as evidenced by its cleavage of MYOC at the specific site 'Arg-226.' Furthermore, CAPN2 is involved in the regulation of neuronal stimulation-induced proteolytic cleavage of CPEB3, leading to the abolishment of CPEB3's translational repressor activity. This event subsequently facilitates the translation of CPEB3 target mRNAs, highlighting the multifaceted role of CAPN2 in orchestrating cellular processes associated with cytoskeletal dynamics, signal transduction, and neuronal function.

Caution: Product has not been fully validated for medical applications. For research use only.

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