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

S H D R A I K Y L N Q D Y E A L R N E C L E A G T L F Q D P S F P A I P S A L G
F K E L G P Y S S K T R G I E W K R P T E I C A D P Q F I I G G A T R T D I C Q
G A L G D C W L L A A I A S L T L N E E I L A R V V P L N Q S F Q E N Y A G I F
H F Q F W Q Y G E W V E V V V D D R L P T K D G E L L F V H S A E G S E F W S A
L L E K A Y A K I N G C Y E A L S G G A T T E G F E D F T G G I A E W Y E L K K
P P P N L F K I I Q K A L Q K G S L L G C S I D I T S A A D S E A I T F Q K L V
K G H A Y S V T G A E E V E S N G S L Q K L I R I R N P W G E V E W T G R W N D
N C P S W N T I D P E E R E R L T R R H E D G E F W M S F S D F L R H Y S R L E
I C N L T P D T L T S D T Y K K W K L T K M D G N W R R G S T A G G C R N Y P N
T F W M N P Q Y L I K L E E E D E D E E D G E S G C T F L V G L I Q K H R R R Q
R K M G E D M H T I G F G I Y E V P E E L S G Q T N I H L S K N F F L T N R A R
E R S D T F I N L R E V L N R F K L P P G E Y I L V P S T F E P N K D G D F C I
R V F S E K K A D Y Q A V D D E I E A N L E E F D I S E D D I D D G F R R L F A
Q L A G E D A E I S A F E L Q T I L R R V L A K R Q D I K S D G F S I E T C K I
M V D M L D S D G S G K L G L K E F Y I L W T K I Q K Y Q K I Y R E I D V D R S
G T M N S Y E M R K A L E E A G F K M P C Q L H Q V I V A R F A D D Q L I I D F
D N F V R C L V R L E T L F K I F K Q L D P E N T G T I E L D L I S W L C F S V
L

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.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
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.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA