

Recombinant Human CAPNS1 and CAPN2 Protein, His tagged

Cat. No. CAPN2-01H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species Human

Source E.coli

ProteinLength CAPNS1: 26-268 aa CAPN2: 1-700 aa

Description

The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous enzymes consist of heterodimers with distinct large, catalytic subunits associated with a common small, regulatory subunit. This gene encodes the large subunit of the ubiquitous enzyme, calpain 2. Multiple heterogeneous transcriptional start sites in the 5' UTR have been reported. Two transcript variants encoding different isoforms have been found for this gene.

Molecular Mass CAPNS1: 26 kDa CAPN2: 82 kDa

AA Sequence

CAPNS1: MGNVLGGLISGAGGGGGGGGGGGGGGGGGGGTAMRILGGVISAISEA
AAQYNPEPPPPRTHYSNIEANESEEVQRRLFAQLAGDDMEVSATELMNILNKVVT
RHPDLKTDGFGIDTCRSMVAVMDSDTTGKLGFEFEFKYLWNNIKRWQAIYKQFDTDR
SGTICSSSELPGAFEAAAGFHLNEHLYNMIIRRYSDSGNMDFDNFISCLVRLDAMFRAF
KSLDKDGTGQIQVNIQEWLQLTMYS CAPN2: MAGIAAKLAKDREAAEGLGSHDRAIK
YLNQDYEALRNECLEAGTLFQDPSFPAIPSA LGFKELGPYSSKTRGIEWKRPTEICAD
PQFIIGGATRTDICQGALGDCWLLAAIASLTLNEEILARVVPLNQSFQENYAGIFHFQF

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WQYGEWVEVVDDRLPTKDGELLFVHSAEGSEFWSALLEKAYAKINGCYEALSGG
 ATTEGFEDFTGGIAEWYELKKPPPNLFKIIQKALQKGSLLGCSIDITSAADSEAITFQKL
 VKGHAYSVTGAAEEVESNGSLQKLIRINPWGEVEWTGRWNDNCPSWNTIDPEERE
 RLTRRHEDGEFWMSFSDFLRHYSRLEICNLTPDTLTSDTYKKWKLTKMDGNWRRG
 STAGGCRNYPNTFWMNPQYLIKLEEEDEDEEDGESGCTFLVGLIQKHRRRQRKMG
 EDMHTIGFGIYEVPEELSGQTNIHLSKNFFLTNRARERSDTFINLREVLNRFKLPPGE
 YILVPSTFEPNKDGDGFCIRVFSEKKADYQAVDDEIEANLEEFDISEDDIDDGFRRLFAQ
 LAGEDAEISAFELQTILRRVLAKRQDIKSDGFSIETCKIMVMDLSDGSGKLGLKEFYI
 LWTKIQKYQKIYREIDVDRSGTMNSYEMRKALEEAGFKMPCQLHQVIVARFADDQLII
 DFDNFVRCLVRLETFLFKIFKQLDPENTGTIELDLISWLCFSVLGKLAAALEHHHHHH

Bio-Activity

18.5 U/mg protein. One unit is defined as the amount of enzyme that cleaves 1pmol of the caspase substrate N-succinyl-Leu-Tyr-7-amido-4-methylcoumarin per 15min at 37 centigrade.

Purity

> 90% by SDS-PAGE

Storage

Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Storage Buffer

Sterile 50 mM Tris, 100 mM NaCl, 40% Glycerol, 5mM EDTA, 5mM 2-Mercaptoethanol, pH7.4

Concentration

0.2 mg/mL by BCA

GeneID 2

826

GENE INFORMATION

Gene Name

CAPN2 calpain 2 [Homo sapiens (human)]

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Official Symbol	CAPN2
Synonyms	CAPN2; calpain 2, (m/II) large subunit; calpain-2 catalytic subunit; CANPL2; CANPml; mCANP; CANP 2; M-calpain; calpain M-type; millimolar-calpain; calpain-2 large subunit; calpain 2, large subunit; calpain large polypeptide L2; calpain, large polypeptide L2; calpain 2, large [catalytic] subunit; calcium-activated neutral proteinase 2; CANP2; FLJ39928
Gene ID	824
mRNA Refseq	NM_001146068
Protein Refseq	NP_001139540
MIM	114230
UniProt ID	P17655
Gene Name 2	CAPNS1 calpain small subunit 1 [Homo sapiens (human)]
Official Symbol 2	CAPNS1
Synonyms 2	CAPNS1; calpain, small subunit 1; CAPN4; calpain small subunit 1; 30K; CANP; CANPS; CDPS; CANP small subunit; calpain regulatory subunit; calpain, small polypeptide; calpain 4, small subunit (30K); calcium-dependent protease, small subunit; calcium-dependent protease small subunit 1; calcium-activated neutral proteinase small subunit; CSS1; CALPAIN4
mRNA Refseq 2	NM_001003962
Protein Refseq 2	NP_001003962

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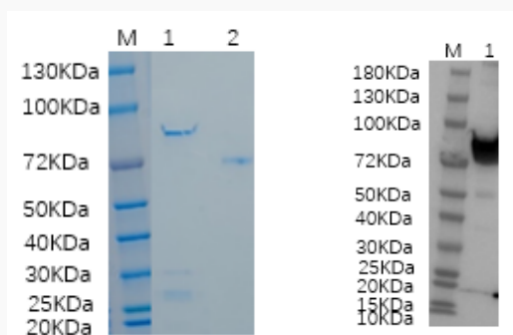
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MIM 2 114170

UniProt ID 2 P04632

Gene ID 2 826

Reducing 12% SDS-PAGE (CBB stained) and WB (Anti-His Mouse Monoclonal Antibody) analysis profiles of purified Calpain-2.



1. Calpain-2: 1 µg 2. BSA: 1 µg

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