

Active Recombinant Human CAPN2 Protein, His-tagged

Cat. No. CAPN2-587H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human CAPN2 Protein(Leu45~Asp514), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	45-514 aa
Form	PBS, pH7.4, containing 0.01% SKL, 5%Trehalose.
Bio-activity	Calpain 2 (CAPN2) is a calcium-regulated, non-lysosomal thiolprotease that is known for its crucial role in catalyzing the limited proteolysis of substrates essential for cytoskeletal remodeling and signaling pathways. It belongs to the family of calpains, a group of enzymes that are activated by calciumions.Besides,CAPN1 has been identified as an interactor of CAPN2, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CAPN2 and recombinant rat CAPN1. Briefly, CAPN2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to CAPN1-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-CAPN2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µ stop solution to the wells and read at 450/630nm immediately. The

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binding activity of recombinant humanCAPN2 and recombinant rat CAPN1 was shown, the EC50 for this effect is 0.044ug/mL.

Molecular Mass	57.4kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	>95%
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month, -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	CAPN2 calpain 2, (m/II) large subunit [Homo sapiens]
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

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Protein Refseq	NP_001139540
MIM	114230
UniProt ID	P17655
Activity	
SDS-PAGE	

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