

# Recombinant Full Length Human CAPNS1 Protein, GST-tagged

**Cat. No.** CAPNS1-2827HF    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>Product Overview</b> | Human CAPNS1 full-length ORF (AAH21933.1, 1 a.a. - 268 a.a.) recombinant protein with GST-tag at N-terminal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>           | In Vitro Cell Free System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>ProteinLength</b>    | 268 amino acids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Description</b>      | <p>This gene is a member of the calpain small subunit family. Calpains are calcium-dependent cysteine proteinases that are widely distributed in mammalian cells. Calpains operate as heterodimers, comprising a specific large catalytic subunit (calpain 1 subunit in Calpain I, and calpain 2 subunit in Calpain II), and a common small regulatory subunit encoded by this gene. This encoded protein is essential for the stability and function of both calpain heterodimers, whose proteolytic activities influence various cellular functions including apoptosis, proliferation, migration, adhesion, and autophagy. Calpains have been implicated in neurodegenerative processes, such as myotonic dystrophy. A pseudogene of this gene has been defined on chromosome 1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]</p> |
| <b>Molecular Mass</b>   | 54.7 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>AA Sequence</b>      | MFLVNSFLKGGGGGGGGGGGLGGGLGNVLGGLISAGGGGGGGGGGGGGGGGGGGGGGGGTAMRILGGVISAISEAAAQYNPEPPPPRTHYSNIEANESEEVQRRLFAQLA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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GDDMEVSATELMNILNKVVTRHPDLKTDGFGIDTCRSMVAVMDSDDTGKLGFEFFK  
YLWNNIKRWQAIYKQFDTDRSGTICSSSELPGAFAAGFHLNEHLYNMIIRRYSDSEG  
NMDFDNFISCLVRLDAMFRAFKSLDKDGTGQIQVNIQEWLQLTMFS

**Applications**

Enzyme-linked Immunoabsorbent Assay  
Western Blot (Recombinant protein)  
Antibody Production  
Protein Array

**Storage**

Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

**Storage Buffer**

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

## GENE INFORMATION

**Gene Name**

CAPNS1 calpain, small subunit 1 [ Homo sapiens ]

**Official Symbol**

CAPNS1

**Synonyms**

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;

**Gene ID**

826

**mRNA Refseq**

NM\_001003962

**Protein Refseq**

NP\_001003962

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| MIM | 114170 |
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| UniProt ID | P04632 |
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