PRODUCT INFORMATION

Expression system E.coli

Domain 84-268aa

UniProt No. P04632

NCBI Accession No. NP_001740

Alternative Names Calpain small subunit 1, Calpain, small subunit 1, 30K, CALPAIN4, CANP, CANPS, CAPN4, CDPS, CSS1

PRODUCT SPECIFICATION

Molecular Weight 23.8 kDa (208aa) confirmed by MALDI-TOF

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol, 1mM DTT

Purity > 95% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Calpains are a ubiquitous, well-conserved family of calcium-dependent, cysteine proteases. Calpain families have been implicated in neurodegenerative processes, as their activation can be triggered by calcium influx and oxidative stress. Calpain I and II are heterodimeric with distinct large subunits associated with common small subunits, all of which are encoded by different genes. Recombinant human CAPNS1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.



Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSRTHYSNI EANESEEVRQ FRRLFAQLAG DDMEVSATEL MNILNKVVTR HPDLKTDGFG IDTCRSMVAV MDSDTTGKLG FEEFKYLWNN IKRWQAIYKQ FDTDRSGTIC SSELPGAFEA AGFHLNEHLY NMIIRRYSDE SGNMDFDNFI SCLVRLDAMF RAFKSLDKDG TGQIQVNIQE WLQLTMYS

General References

Ohno S., Emori Y, et al. (1986) Nucleic Acids Res. 14:5559-5559

