

CAPNS1 Antibody (N-term) Blocking peptide Synthetic peptide Catalog # BP13301a

Specification

CAPNS1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

<u>P04632</u>

CAPNS1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 826

Other Names

Calpain small subunit 1, CSS1, Calcium-activated neutral proteinase small subunit, CANP small subunit, Calcium-dependent protease small subunit, CDPS, Calcium-dependent protease small subunit 1, Calpain regulatory subunit, CAPNS1, CAPN4, CAPNS

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13301a was selected from the N-term region of CAPNS1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CAPNS1 Antibody (N-term) Blocking peptide - Protein Information

Name CAPNS1

Synonyms CAPN4, CAPNS

Function

Regulatory subunit of the calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. Essential for embryonic development (By similarity).

Cellular Location

Cytoplasm. Cell membrane. Note=Translocates to the plasma membrane upon calcium binding.



CAPNS1 Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• **Blocking Peptides**

CAPNS1 Antibody (N-term) Blocking peptide - Images

CAPNS1 Antibody (N-term) Blocking peptide - Background

Calpains are a ubiquitous, well-conserved family of calcium-dependent, cysteine proteases. Calpain families have been implicated in neurodegenerative processes, as their activation canbe triggered by calcium influx and oxidative stress. Calpain I andII are heterodimeric with distinct large subunits associated with common small subunits, all of which are encoded by different genes. This gene encodes a small subunit common to both calpain I and II and II and Is associated with myotonic dystrophy. Two transcript variants encoding the same protein have been identified for this gene.

CAPNS1 Antibody (N-term) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Zhang, F., et al. J. Med. Virol. 82(6):920-928(2010)Demarchi, F., et al. Cell Cycle 9(4):755-760(2010)Fairfax, B.P., et al. Hum. Mol. Genet. 19(4):720-730(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)