

CREB3L1 Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP6589b

Specification

CREB3L1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Other Accession

<u>Q96BA8</u> <u>NP_443086</u>

CREB3L1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 90993

Other Names

Cyclic AMP-responsive element-binding protein 3-like protein 1, cAMP-responsive element-binding protein 3-like protein 1, Old astrocyte specifically-induced substance, OASIS, Processed cyclic AMP-responsive element-binding protein 3-like protein 1, CREB3L1, OASIS

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6589b was selected from the C-term region of human CREB3L1. 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.

CREB3L1 Antibody (C-term) Blocking Peptide - Protein Information

Name CREB3L1 (HGNC:18856)

Function

[Cyclic AMP-responsive element-binding protein 3-like protein 1]: Precursor of the transcription factor form (Processed cyclic AMP- responsive element-binding protein 3-like protein 1), which is embedded in the endoplasmic reticulum membrane with N-terminal DNA-binding and transcription activation domains oriented toward the cytosolic face of the membrane (PubMed:12054625, PubMed:16417584, PubMed:16417584, PubMed:25310401). In response to ER stress or DNA damage, transported to the Golgi, where it is cleaved in a site-specific manner by resident proteases S1P/MBTPS1 and S2P/MBTPS2. The released N-terminal cytosolic domain is



translocated to the nucleus where it activates transcription of specific target genes involved in the cell-cycle progression inhibition (PubMed:12054625, PubMed:21767813, PubMed:25310401).

Cellular Location

[Cyclic AMP-responsive element-binding protein 3- like protein 1]: Endoplasmic reticulum membrane; Single-pass type II membrane protein Note=ER membrane resident protein. Upon ER stress, translocated to the Golgi apparatus where it is cleaved. The cytosolic N-terminal fragment (processed cyclic AMP-responsive element-binding protein 3-like protein 1) is transported into the nucleus.

Tissue Location

Expressed in several tissues, with highest levels in pancreas and prostate. Expressed at relatively lower levels in brain.

CREB3L1 Antibody (C-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

CREB3L1 Antibody (C-term) Blocking Peptide - Images

CREB3L1 Antibody (C-term) Blocking Peptide - Background

CREB3L1 is a transcription factor that acts during endoplasmic reticulum stress by activating unfolded protein response target genes. It is specifically involved in ER-stress response in astrocytes in the central nervous system (By similartity). It may play a role in gliosis. In vitro, it binds to box-B element, cAMP response element (CRE) and CRE-like sequences, and activates transcription through box-B element but not through CRE.

CREB3L1 Antibody (C-term) Blocking Peptide - References

Guillou,L., Am. J. Surg. Pathol. 31 (9), 1387-1402 (2007)Omori,Y., Biochem. Biophys. Res. Commun. 293 (1), 470-477 (2002)