10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CREB3L1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6589B

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q96BA8
Other Accession	NP_443086
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19585
Calculated MW	57005
Antigen Region	481-509

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	This CREB3L1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 481-509 amino acids from the C-terminal region of human CREB3L1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CREB3L1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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: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.

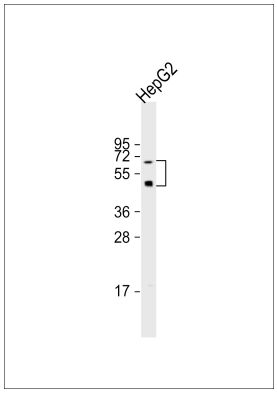
Background

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.

References

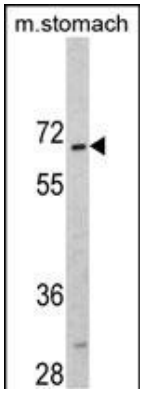
Guillou,L., Am. J. Surg. Pathol. 31 (9), 1387-1402 (2007)
Omori,Y., Biochem. Biophys. Res. Commun. 293 (1), 470-477 (2002)

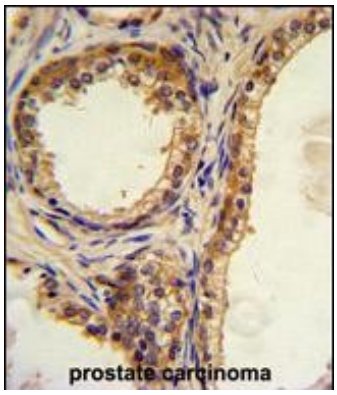
Images



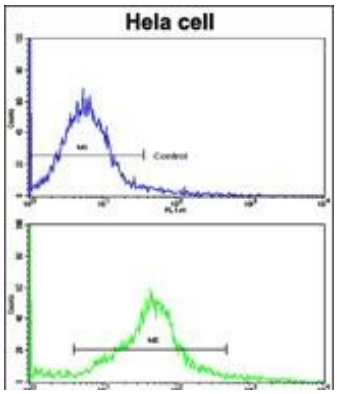
Anti-CREB3L1 Antibody (C-term) at 1:8000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 57 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of CREB3L1 Antibody (C-term) (Cat. #AP6589b) in mouse stomach tissue lysates (35ug/lane). CREB3L1 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human prostate carcinoma with CREB3L1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of hela cells using CREB3L1 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.