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

CREB3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20041a

Product Information

Application	WB, E
Primary Accession	O43889
Other Accession	NP_006359.3
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42213
Calculated MW	41379
Antigen Region	66-94

Additional Information

Gene ID	10488
Other Names	Cyclic AMP-responsive element-binding protein 3, CREB-3, cAMP-responsive element-binding protein 3, Leucine zipper protein, Luman, Transcription factor LZIP-alpha, Processed cyclic AMP-responsive element-binding protein 3, N-terminal Luman, Transcriptionally active form, CREB3, LZIP
Target/Specificity	This CREB3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-94 amino acids from the N-terminal region of human CREB3.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	CREB3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CREB3

Synonyms	LZIP
Function	Endoplasmic reticulum (ER)-bound sequence-specific transcription factor that directly binds DNA and activates transcription (PubMed:10984507, PubMed:15845366, PubMed:16940180, PubMed:19779205, PubMed:9271389). Plays a role in the unfolded protein response (UPR), promoting cell survival versus ER stress-induced apoptotic cell death (PubMed:15845366, PubMed:16940180). Also involved in cell proliferation, migration and differentiation, tumor suppression and inflammatory gene expression. Acts as a positive regulator of LKN- 1/CCL15-induced chemotaxis signaling of leukocyte cell migration (PubMed:15001559, PubMed:17296613, PubMed:19779205). Associates with chromatin to the HERPUD1 promoter (PubMed:16940180). Also induces transcriptional activation of chemokine receptors (PubMed:17296613, PubMed:18587271).
Cellular Location	[Isoform 1]: Endoplasmic reticulum membrane; Single-pass type II membrane protein {ECO:0000255, ECO:0000269|PubMed:12138176}. Golgi apparatus. Note=Colocalizes with HCFC1 in neuronal cell bodies of the trigeminal ganglia (PubMed:10623756). Colocalizes with DCSTAMP in the ER membrane of immature dendritic cell (DC) (PubMed:20546900). Colocalizes with CANX, CCR1, HCFC1 in the ER membrane (PubMed:10623756). [Isoform 2]: Nucleus. Cytoplasm Note=Predominantly in the nucleus (PubMed:19779205). Not associated with membranes (PubMed:19779205).
Tissue Location	Ubiquitously expressed (PubMed:19779205, PubMed:9271389). Expressed in dendritic cells (DC). Weakly expressed in monocytes (at protein level) (PubMed:20546900)

Background

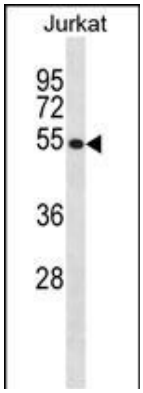
This gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. This protein binds to the cAMP-response element and regulates cell proliferation. The protein interacts with host cell factor C1, which also associates with the herpes simplex virus (HSV) protein VP16 that induces transcription of HSV immediate-early genes. This protein and VP16 both bind to the same site on host cell factor C1. It is thought that the interaction between this protein and host cell factor C1 plays a role in the establishment of latency during HSV infection. This protein also plays a role in leukocyte migration, tumor suppression, and endoplasmic reticulum stress-associated protein degradation. Additional transcript variants have been identified, but their biological validity has not been determined.

References

Kim, H.C., et al. Cell. Mol. Life Sci. 67(20):3499-3510(2010)
Eleveld-Trancikova, D., et al. Mol. Immunol. 47 (11-12), 1963-1973 (2010) :
Kang, H., et al. Mol. Endocrinol. 23(11):1746-1757(2009)
Mamdani, F., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 147B (4), 500-504 (2008) :
Audas, T.E., et al. Mol. Cell. Biol. 28(12):3952-3966(2008)

Images

CREB3 Antibody (N-term) (Cat. #AP20041a) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the CREB3 antibody detected the CREB3 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.