

CREB3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21435b

Specification

CREB3 Antibody (C-term) - Product Information

Application WB,E
Primary Accession O43889
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 41379

CREB3 Antibody (C-term) - 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 a rabbit immunized with a KLH conjugated synthetic peptide between 311-344 amino acids from the C-terminal region of human CREB3.

Dilution

WB~~1:8000

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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CREB3 Antibody (C-term) - 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)

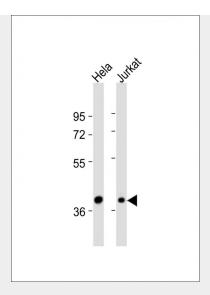
CREB3 Antibody (C-term) - Protocols

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

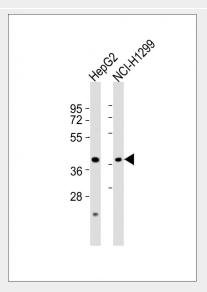
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CREB3 Antibody (C-term) - Images





All lanes : Anti-CREB3 Antibody (C-term) at 1:8000 dilution Lane 1: Hela whole cell lysates Lane 2: Jurkat whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

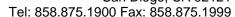


All lanes : Anti-CREB3 Antibody (C-term) at 1:8000 dilution Lane 1: HepG2 whole cell lysates Lane 2: NCI-H1299 whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CREB3 Antibody (C-term) - Background

Endoplasmic reticulum (ER)-bound transcription factor that plays a role in the unfolded protein response (UPR). Involved in cell proliferation and migration, tumor suppression and inflammatory gene expression. Plays also a role in the human immunodeficiency virus type 1 (HIV-1) virus protein expression and in the herpes simplex virus-1 (HSV-1) latent infection and reactivation from latency. Isoform 2 plays a role in the unfolded protein response (UPR). Isoform 2 acts as a positive regulator of LKN-1/CCL15-induced chemotaxis signaling of leukocyte cell migration. Isoform 2 may play a role as a cellular tumor suppressor that is targeted by the hepatitis C virus (HSV) core protein. Isoform 2 represses the VP16-mediated transactivation of immediate early genes of the HSV-1 virus by sequestring host cell factor-1 HCFC1 in the ER membrane of sensory neurons, thereby preventing the initiation of the replicative cascade leading to latent infection. Isoform 3 functions as a negative







transcriptional regulator in ligand-induced transcriptional activation of the glucocorticoid receptor NR3C1 by recruiting and activating histone deacetylases (HDAC1, HDAC2 and HDAC6). Isoform 3 decreases the acetylation level of histone H4. Isoform 3 does not promote the chemotactic activity of leukocyte cells.

CREB3 Antibody (C-term) - References

Lu R., et al. Mol. Cell. Biol. 17:5117-5126(1997). Freiman R.N., et al. Genes Dev. 11:3122-3127(1997). Jin D.-Y., et al. EMBO J. 19:729-740(2000). Kang H., et al. Mol. Endocrinol. 23:1746-1757(2009). Hayashi M., et al. Submitted (FEB-1997) to the EMBL/GenBank/DDBJ databases.