

Catalog # AF4010a

CREB3L2 Antibody (N-Term) Peptide-affinity purified goat antibody

Specification

CREB3L2 Antibody (N-Term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>Q70SY1</u> NP_919047.2, NP_001240704.1, 64764 Human Goat Polyclonal 0.5 mg/ml IgG 57415

CREB3L2 Antibody (N-Term) - Additional Information

Gene ID 64764

Other Names

Cyclic AMP-responsive element-binding protein 3-like protein 2, cAMP-responsive element-binding protein 3-like protein 2, BBF2 human homolog on chromosome 7, Processed cyclic AMP-responsive element-binding protein 3-like protein 2, CREB3L2, BBF2H7

Dilution WB~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CREB3L2 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

CREB3L2 Antibody (N-Term) - Protein Information

Name CREB3L2

Synonyms BBF2H7



Function

Transcription factor involved in unfolded protein response (UPR). In the absence of endoplasmic reticulum (ER) stress, inserted into ER membranes, with N-terminal DNA-binding and transcription activation domains oriented toward the cytosolic face of the membrane. In response to ER stress, 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 to effect transcription of specific target genes. Plays a critical role in chondrogenesis by activating the transcription of SEC23A, which promotes the transport and secretion of cartilage matrix proteins, and possibly that of ER biogenesis-related genes (By similarity). In a neuroblastoma cell line, protects cells from ER stress-induced death (PubMed:17178827). In vitro activates transcription of target genes via direct binding to the CRE site (PubMed:17178827).

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q8BH52}; 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. {ECO:0000250|UniProtKB:Q8BH52}

Tissue Location

Widely expressed with highest levels in placenta, lung, spleen and intestine, and lowest levels in heart, brain, skeletal muscle, thymus, colon and leukocytes. In fetal tissues, the weakest expression is detected in brain and heart

CREB3L2 Antibody (N-Term) - Protocols

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

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

CREB3L2 Antibody (N-Term) - Images



AF4010a (5 µg/ml) staining of paraffin embedded Human Placenta. Steamed antigen retrieval



with citrate buffer pH 6, AP-staining.



AF4010a (1 μ g/ml) staining of Human Placenta lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

CREB3L2 Antibody (N-Term) - Background

This antibody is expected to recognize both reported isoforms (NP_919047.2; NP_001240704.1).

CREB3L2 Antibody (N-Term) - References

BBF2H7-mediated Sec23A pathway is required for endoplasmic reticulum-to-Golgi trafficking in dermal fibroblasts to promote collagen synthesis. Ishikura-Kinoshita S, Saeki H, Tsuji-Naito K. The Journal of investigative dermatology 2012 Aug 132 (8): 2010-8. PMID: 22495181