

# CREBL1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5101b

#### **Product Information**

Application WB, IHC-P, E Primary Accession Q99941

**Reactivity** Human, Hamster, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB25603Calculated MW76709Antigen Region560-589

## **Additional Information**

**Gene ID** 1388

Other Names Cyclic AMP-dependent transcription factor ATF-6 beta, cAMP-dependent

transcription factor ATF-6 beta, Activating transcription factor 6 beta, ATF6-beta, Protein G13, cAMP response element-binding protein-related protein, Creb-rp, cAMP-responsive element-binding protein-like 1, Processed cyclic AMP-dependent transcription factor ATF-6 beta, ATF6B, CREBL1, G13

Target/Specificity This CREBL1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 560-589 amino acids from the

C-terminal region of human CREBL1.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 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** CREBL1 Antibody (C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name ATF6B

Synonyms CREBL1, G13

**Function** [Cyclic AMP-dependent transcription factor ATF-6 beta]: Precursor of the

transcription factor form (Processed cyclic AMP- dependent transcription factor ATF-6 beta), which is embedded in the endoplasmic reticulum membrane (PubMed:11256944). Endoplasmic reticulum stress promotes processing of this form, releasing the transcription factor form that translocates into the nucleus, where it activates transcription of genes involved in the unfolded protein response (UPR) (PubMed:11256944).

**Cellular Location** Endoplasmic reticulum membrane; Single-pass type II membrane protein

Tissue Location Ubiquitous...

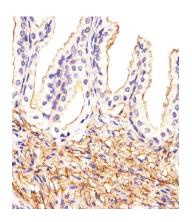
## **Background**

CREBL1 is a transcription factor in the unfolded protein response (UPR) pathway during ER stress. Either as a homodimer or as a heterodimer with ATF6-alpha, the encoded protein binds to the ER stress response element, interacting with nuclear transcription factor Y to activate UPR target genes. The protein is normally found in the membrane of the endoplasmic reticulum; however, under ER stress, the N-terminal cytoplasmic domain is cleaved from the rest of the protein and translocates to the nucleus.

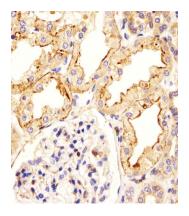
#### References

Guan, D., et al. J. Cell. Biochem. 108(4):825-831(2009) Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) Thuerauf, D.J., et al. J. Biol. Chem. 279(20):21078-21084(2004)

## **Images**

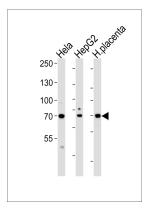


Immunohistochemical analysis of paraffin-embedded H. prostate section using CREBL1 Antibody (C-term)(Cat#AP5101b). AP5101b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

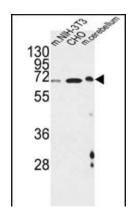


Immunohistochemical analysis of paraffin-embedded H. kidney section using CREBL1 Antibody (C-term)(Cat#AP5101b). AP5101b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Western blot analysis of lysates from Hela, HepG2 cell line and human placenta tissue lysate (from left to right), using CREBL1Antibody (C-term) (Cat. #AP5101b). AP5101b



was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



CREBL1 Antibody (C-term) (Cat. #AP5101b) western blot analysis in mouse NIH-3T3,CHO cell line and mouse cerebellum tissue lysates (35ug/lane).This demonstrates the CREBL1 antibody detected the CREBL1 protein (arrow).

## **Citations**

• Midazolam regulated caspase pathway, endoplasmic reticulum stress, autophagy, and cell cycle to induce apoptosis in MA-10 mouse Leydig tumor cells.

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