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# CREB3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21435b

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | O43889 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB50244 |
| **Calculated MW** | 41379 |

## Additional Information

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| **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 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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. |

## Protein Information

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| **Name** | CREB3 |
| **Synonyms** | LZIP |
| **Function** | Endoplasmic reticulum (ER)-bound sequence-specific transcription factor |

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| | 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

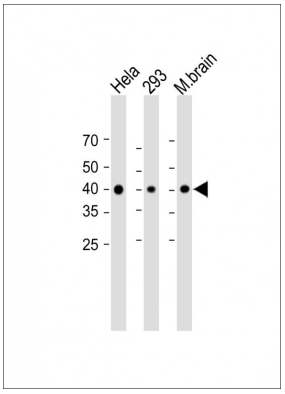
Endoplasmic reticulum (ER)-bound transcription factor that plays a role in the unfolded protein response (UPR). Involved in cell proliferation and migration, tumor suppression and inflammatory gene expression. Plays also a role in the human immunodeficiency virus type 1 (HIV-1) virus protein expression 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.

## 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.


## Images

All lanes: Anti-CREB3 Antibody (C-term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: 293 whole cell lysate Lane 3: Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L),




Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 41 KDa Blocking/Dilution buffer: 5% NFDM/TBST.