

### **CREB3 Blocking Peptide (C-term)**

Synthetic peptide Catalog # BP21435b

### **Specification**

### **CREB3 Blocking Peptide (C-term) - Product Information**

Primary Accession

043889

## CREB3 Blocking Peptide (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

The synthetic peptide sequence is selected from aa 311-324 of HUMAN CREB3

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### **CREB3 Blocking Peptide (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:<a href="http://www.uniprot.org/citations/9271389" target="\_blank">9271389</a>, PubMed:<a href="http://www.uniprot.org/citations/19779205" target="\_blank">19779205</a>, PubMed:<a href="http://www.uniprot.org/citations/10984507" target="\_blank">10984507</a>, PubMed:<a href="http://www.uniprot.org/citations/15845366" target="\_blank">15845366</a>, PubMed:<a href="http://www.uniprot.org/citations/16940180" target="\_blank">16940180</a>). Plays a role in the unfolded protein response (UPR), promoting cell survival versus ER stress-induced apoptotic cell death (PubMed:<a href="http://www.uniprot.org/citations/15845366" target="\_blank">15845366</a>, PubMed:<a href="http://www.uniprot.org/citations/16940180" target="\_blank">16940180</a>). 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:<a href="http://www.uniprot.org/citations/19779205" target="\_blank">19779205"/a>, PubMed:<a href="http://www.uniprot.org/citations/15001559" target="\_blank">15001559</a>, PubMed:<a href="http://www.uniprot.org/citations/17296613" target="\_blank">17296613</a>, PubMed:<a href="http://www.uniprot.org/citations/16940180" target="\_blank">16940180</a>, Associates with chromatin to the HERPUD1 promoter (PubMed:<a href="http://www.uniprot.org/citations/16940180" target="\_blank">16940180</a>, Also induces transcriptional activation of chemokine receptors (PubMed:<a href="http://www.uniprot.org/citations/18587271" target="\_blank">18587271</a>, PubMed:<a href="http://www.uniprot.org/citations/17296613" target="\_blank">17296613</a>,).

### **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:9271389, PubMed:19779205). Expressed in dendritic cells (DC). Weakly expressed in monocytes (at protein level) (PubMed:20546900)

# **CREB3 Blocking Peptide (C-term) - Protocols**

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

#### Blocking Peptides

**CREB3 Blocking Peptide (C-term) - Images** 

## CREB3 Blocking Peptide (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 Blocking Peptide (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).
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