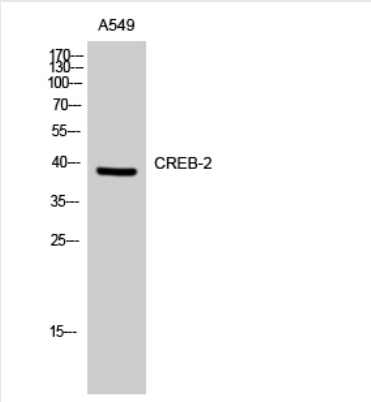
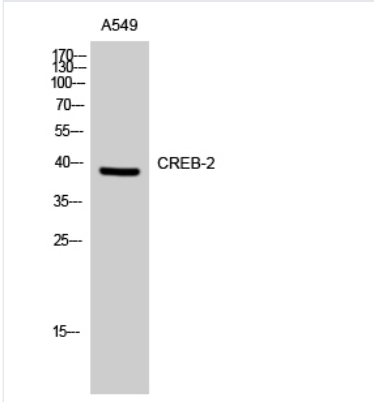
CREB-2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CREB-2, Polyclonal Antibody
Full Product Name	CREB-2 Polyclonal Antibody
Product Gene Name	anti-CREB-2 antibody
Product Synonym Gene Name	ATF4
Product Synonym Names	ATF4; CREB2; TXREB; Cyclic AMP-dependent transcription factor ATF-4; cAMP-dependent transcription factor ATF-4; Activating transcription factor 4; Cyclic AMP-responsive element-binding protein 2; CREB-2; cAMP-responsive element-binding prot
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.
Molecular Weight	40 kDa
Chromosome Location	Chromosome: 22; NC_000022.10 (39916569..39918691). Location: 22q13.1
OMIM	604064
3D Structure	ModBase 3D Structure for P18848
Notes	ECO:0000303|PubMed:2516827, ECO:0000312|HGNC: HGNC:786
Applications Tested/Suitable for anti-CREB-2 antibody	Western Blot (WB)
Related Product Information for anti-CREB-2 antibody	Transcriptional activator. Binds the cAMP response element (CRE)(consensus:5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Cooperates with FOXO1 in osteoblasts to regulate glucose homeostasis through suppression of beta-cell production and decrease in insulin production (By similarity). It binds to a Tax-responsive enhancer element in the long terminal repeat of HTLV-I. Regulates the induction of DDIT3/CHOP and asparagine synthetase (ASNS) in response to endoplasmic reticulum (ER) stress. In concert with DDIT3/CHOP, activates the transcription of TRIB3 and promotes ER stress-induced neuronal apoptosis by regulating the transcriptional induction of BBC3/PUMA. Activates transcription of SIRT4. Regulates the circadian expression of the core clock component PER2 and the serotonin transporter SLC6A4. Binds in a circadian time-dependent manner to the cAMP response elements (CRE) in the SLC6A4 and PER2 promoters and periodically activates the transcription of these genes. During ER stress response, activates the transcription of NLRP1, possibly in concert with other factors (PubMed:26086088).
Other Notes	Small volumes of anti-CREB-2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CREB-2 purchase	MBS9243223 is an antibody targeting CREB-2. Also known as CREB-2 Polyclonal Antibody. Reactive in Human, Mouse. Host: Rabbit.



Wester Blot (WB) of anti-CREB-2 antibody
Dilution: Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.



Western Blot (WB) of anti-CREB-2 antibody
Dilution: Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CREB-2. It may not necessarily be applicable to this product.

NCBI GI #	33469976
NCBI GeneID	468
NCBI Accession #	NP_001666.2
UniProt Primary Accession #	P18848
UniProt Secondary Accession #	Q9UH31
UniProt Related Accession #	P18848
GenBank Nucleotide #	NM_001675.2
NCBI Official Full Name	cyclic AMP-dependent transcription factor ATF-4
NCBI Official Synonym Full Names	activating transcription factor 4
NCBI Official Symbol	ATF4
NCBI Official Synonym Symbols	CREB2; TXREB; CREB-2; TAXREB67
UniProt Protein Name	Cyclic AMP-dependent transcription factor ATF-4
UniProt Synonym Protein Names	Activating transcription factor 4; Cyclic AMP-responsive element-binding protein 2; CREB-2; cAMP-responsive element-binding protein 2; DNA-binding protein TAXREB67; Tax-responsive enhancer element-binding protein 67
UniProt Gene Name	ATF4
UniProt Synonym Gene Names	CREB2; TXREB; cAMP-dependent transcription factor ATF-4; CREB-2; cAMP-responsive element-binding protein 2; TaxREB67
UniProt Entry Name	ATF4_HUMAN
NCBI Protein Information	cyclic AMP-dependent transcription factor ATF-4; DNA-binding protein TAXREB67; tax-responsive enhancer element B67; cAMP response element-binding protein 2; cAMP-dependent transcription factor ATF-4; cAMP-responsive element-binding protein 2; cyclic AMP-r
NCBI Summary for CREB-2	This gene encodes a transcription factor that was originally identified as a widely expressed mammalian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTLV-1. The encoded protein was also isolated and characterized as the cAMP-response element binding protein 2 (CREB-2). The protein encoded by this gene belongs to a family of DNA-binding proteins that includes the AP-1 family of transcription factors, cAMP-response element binding proteins (CREBs) and CREB-like proteins. These transcription factors share a leucine zipper region that is involved in protein-protein interactions, located C-terminal to a stretch of basic amino acids that functions as a DNA binding domain. Two alternative transcripts encoding the same protein have been described. Two pseudogenes are located on the X chromosome at q28 in a region containing a large inverted duplication. [provided by RefSeq, Sep 2011]

UniProt Comments for CREB-2	ATF-4: a transcription factor that is a member of the leucine zipper family. Isolated and characterized as the cAMP-response element binding protein 2 (CREB-2). Involved in cisplatin resistance. Other members of the family include AP-1 transcription factors, cAMP-response element binding proteins (CREBs) and CREB-like proteins. Two alternatively spliced isoforms have been described. Protein type: Transcription factor; DNA-binding Chromosomal Location of Human Ortholog: 22q13.1 Cellular Component: nucleoplasm; neuron projection; cytoplasm; microtubule organizing center; nucleus Molecular Function: protein C-terminus binding; protein binding; leucine zipper domain binding; DNA binding; sequence-specific DNA binding; protein heterodimerization activity; transcription factor activity Biological Process: transcription from RNA polymerase II promoter; amino acid metabolic process; unfolded protein response; positive regulation of apoptosis; negative regulation of potassium ion transport; positive regulation of transcription, DNA-dependent; gluconeogenesis; positive regulation of transcription from RNA polymerase I promoter; cellular response to glucose starvation; cellular protein metabolic process; unfolded protein response, activation of signaling protein activity; regulation of transcription, DNA-dependent; positive regulation of neuron apoptosis; positive regulation of transcription from RNA polymerase II promoter; circadian regulation of gene expression; gamma-aminobutyric acid signaling pathway
Research Articles on CREB-2	**1.** ATF4 acts as a positive regulator in TLR4-triggered cytokine production.
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