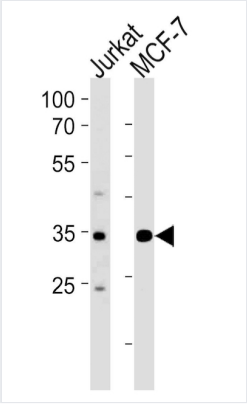
ATF4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	ATF4, Polyclonal Antibody
Full Product Name	ATF4, ID (ATF4, CREB2, TXREB, Cyclic AMP-dependent transcription factor ATF-4, Activating transcription factor 4, Cyclic AMP-responsive element-binding protein 2, DNA-binding protein TAXREB67, Tax-responsive enhancer element-binding protein 67) (Biotin)
Product Gene Name	anti-ATF4 antibody
Product Synonym Names	ATF4; CREB2; TXREB; Cyclic AMP-dependent transcription factor ATF-4; Activating transcription factor 4; Cyclic AMP-responsive element-binding protein 2; DNA-binding protein TAXREB67; Tax-responsive enhancer element-binding protein 67
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Biotin.
Purity/Purification	Purified by Protein A and Peptide Affinity Chromatography.
Specificity	Recognizes human ATF4.
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
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
Immunogen	KLH-conjugated synthetic peptide mapping to a fragment of residues within amino acids 171-198 in the Central terminal region of human ATF4.
Conjugate	Biotin
Note	Preservative Free
Product Categories/Family for anti-ATF4 antibody	Antibodies; Transcription Factors
Applications Tested/Suitable for anti-ATF4 antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-ATF4 antibody	Applications are based on unconjugated antibody.

Related Product Information for anti-ATF4 antibody	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 chromsome at q28 in a region containing a large inverted duplication.
Product References and Citations for anti-ATF4 antibody	1. Dey, S., et al. J. Biol. Chem. 285(43):33165-33174(2010). 2. Frank, C.L., et al. J. Biol. Chem. 285(43):33324-33337(2010). 3. Rzymski, T., et al. Oncogene 29(31):4424-4435(2010). 4. Liew, C.W., et al. J. Clin. Invest. 120(8):2876-2888(2010). 5. Wek, R.C., et al. EMBO J. 29(12):1946-1947(2010).
Other Notes	Small volumes of anti-ATF4 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 ATF4 purchase	MBS6275866 is an antibody targeting ATF4. Also known as ATF4, ID (ATF4, CREB2, TXREB, Cyclic AMP-dependent transcription factor ATF-4, Activating transcription factor 4, Cyclic AMP-responsive element-binding protein 2, DNA-binding protein TAXREB67, Tax-responsive enhancer element-binding protein 67) (Biotin). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-ATF4 antibody
Western Blot analysis in Jurkat, MCF-7 cell line lysates (35ug/lane) usingMBS6004171. This demonstrates that MBS6004171 detected the ATF4 protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ATF4. 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
Protein Family	Cyclic AMP-dependent transcription factor
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 ATF4	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 ATF4	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 ATF4	**1.** ATF4 acts as a positive regulator in TLR4-triggered cytokine production.
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