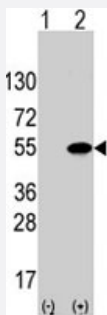


ATF4 polyclonal antibody

Catalog # PAB4874

Size 400 uL

Applications



Western Blot (Transfected lysate)

Western blot analysis of ATF4 (arrow) using rabbit ATF4 polyclonal antibody (Cat # PAB4874). 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ATF4 gene (Lane 2) (Origene Technologies).

Specification

| | |
|----------------------------|---|
| Product Description | Rabbit polyclonal antibody raised against synthetic peptide of ATF4. |
| Immunogen | A synthetic peptide (conjugated with KLH) corresponding to residues surrounding S245 of human ATF4. |
| Host | Rabbit |
| Reactivity | Human |
| Form | Liquid |
| Purification | Protein A purification |
| Recommend Usage | ELISA (1:1000) Western Blot (1:50-100) The optimal working dilution should be determined by the end user. |
| Storage Buffer | In PBS (0.09% sodium azide) |
| Storage Instruction | Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing. |

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Transfected lysate)

Western blot analysis of ATF4 (arrow) using rabbit ATF4 polyclonal antibody (Cat # PAB4874). 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ATF4 gene (Lane 2) (Origene Technologies).

- Enzyme-linked Immunoabsorbent Assay

Gene Info — ATF4

Entrez GeneID [468](#)

Protein Accession# [NP_001666:Q96AQ3](#)

Gene Name ATF4

Gene Alias CREB-2, CREB2, TAXREB67, TXREB

Gene Description activating transcription factor 4 (tax-responsive enhancer element B67)

Omim ID [604064](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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]

Other Designations activating transcription factor 4|cAMP response element-binding protein 2

Publication Reference

- [TRB3 inhibits the transcriptional activation of stress-regulated genes by a negative feedback on the ATF4 pathway.](#)

Jousse C, Deval C, Maurin AC, Parry L, Cherasse Y, Chaveroux C, Lefloch R, Lenormand P, Bruhat A, Fafournoux P.
The Journal of Biological Chemistry 2007 May; 282(21):15851.

Application: ChIP, WB, Human, Mouse , HeLa cells, MEFs

- [ATF4 differentially regulates transcriptional activation of myeloid-specific genes by C/EBPepsilon and C/EBPalpha.](#)

Gombart AF, Grewal J, Koeffler HP.

Journal of Leukocyte Biology 2007 Mar; 81(6):1535.

- [Association analysis of ATF4 and ATF5, genes for interacting-proteins of DISC1, in bipolar disorder.](#)

Kakiuchi C, Ishiwata M, Nanko S, Kunugi H, Minabe Y, Nakamura K, Mori N, Fujii K, Yamada K, Yoshikawa T, Kato T.
Neuroscience Letters 2007 Feb; 417(3):316.

Pathway

- [GnRH signaling pathway](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Prostate cancer](#)

Disease

- [Bipolar Disorder](#)
- [Genetic Predisposition to Disease](#)
- [Mental Disorders](#)
- [Neuropsychological Tests](#)
- [Schizophrenia](#)