

Product Name: ATF-2 (phospho Thr71) Rabbit Polyclonal Antibody
Catalog #: APRab04278

Summary

Production Name	ATF-2 (phospho Thr71) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ATF2
Alternative Names	ATF2; CREB2; CREBP1; Cyclic AMP-dependent transcription factor ATF-2; cAMP-dependent transcription factor ATF-2; Activating transcription factor 2; Cyclic AMP-responsive element-binding protein 2; CREB-2; cAMP-responsive element-binding protein
Gene ID	1386.0
SwissProt ID	P15336.The antiserum was produced against synthesized peptide derived from human ATF2 around the phosphorylation site of Thr71 or 53. AA range:38-87

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000..
Molecular Weight	52kD

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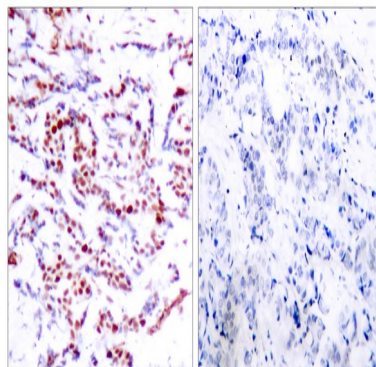
Background

activating transcription factor 2(ATF2) Homo sapiens This gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions This protein binds to the cAMP-responsive element (CRE), an octameric palindrome. It forms a homodimer or a heterodimer with c-Jun and stimulates CRE-dependent transcription. This protein is also a histone acetyltransferase (HAT) that specifically acetylates histones H2B and H4 in vitro; thus it may represent a class of sequence-specific factors that activate transcription by direct effects on chromatin components. The encoded protein may also be involved in cell's DNA damage response independent of its role in transcriptional regulation. Several alternatively spliced transcript variants have been found for this gene [provided by RefSeq, Jan 2014]caution:It is uncertain whether Met-1 or Met-19 is the initiator.,function:Transcriptional activator, probably constitutive, which binds to the cAMP-responsive element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Interaction with JUN redirects JUN to bind to CREs preferentially over the 12-O-tetradecanoylphorbol-13-acetate response elements (TREs) as part of an ATF2-c-Jun complex.,PTM:Phosphorylation of Thr-69 and Thr-71 by MAPK14 causes increased transcriptional activity. Also phosphorylated and activated by JNK.,similarity:Belongs to the bZIP family.,similarity:Belongs to the bZIP family. ATF subfamily.,similarity:Contains 1 bZIP domain.,similarity:Contains 1 C2H2-type zinc finger.,subunit:Binds DNA as a dimer and can form a homodimer in the absence of DNA. Can form a heterodimer with JUN. Interacts with SMAD3 and SMAD4. Binds through its N-terminal region to UTF1 which acts as a coactivator of ATF2 transcriptional activity.,tissue specificity:Abundant expression seen in the brain.,

Research Area

B Cell Receptor; Stem cell pathway; MAPK_ERK_Growth;MAPK_G_Protein; PI3K/Akt; Protein_Acetylation

Image Data

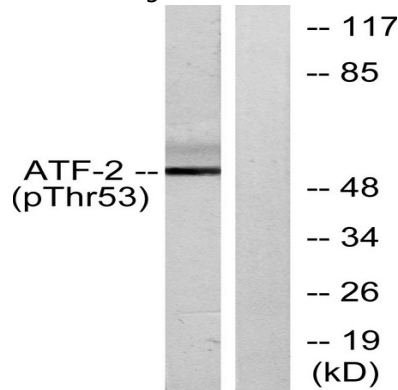


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using ATF2 (Phospho-Thr71 or 53)

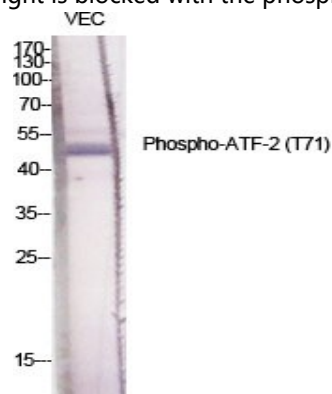
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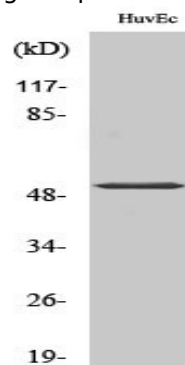
Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with UV, using ATF2 (Phospho-Thr71 or 53) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-ATF-2 (T71) Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of HuvEc cells using Phospho-ATF-2 (T71) Polyclonal Antibody diluted at 1: 1000

Note

For research use only.