Product Name: **ATF-2 Rabbit Polyclonal Antibody**
Catalog #: **APRab07265**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA,IP
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000,IP 1:20-1:50
Molecular Weight	52kDa

Antigen Information

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 pro
Gene ID	1386.0
SwissProt ID	P15336
Immunogen	The antiserum was produced against synthesized peptide derived from human ATF2. AA range:40-89

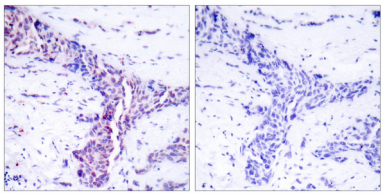
Background

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 2014caution: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.,

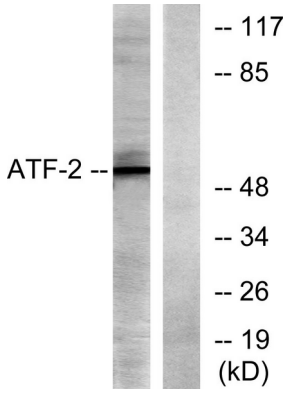
Research Area

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 tissue, using ATF2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from LOVO cells, using ATF2 Antibody. The lane on the right is blocked with the synthesized peptide.