

# **Product Name: ATF-2 Rabbit Polyclonal Antibody**

Catalog #: APRab07269

For research use only.

## **Summary**

**Description** Rabbit polyclonal Antibody

**Host** Rabbit

ApplicationWB,IHC,ICC/IF,ELISAReactivityHuman,Mouse,RatConjugationUnconjugatedModificationUnmodified

**Isotype** IgG

ClonalityPolyclonalFormLiquidConcentration1mg/ml

**Storage** Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.

**Shipping** Ice bags

Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type **Buffer** 

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

Molecular Weight 70kDa

# **Antigen Information**

Gene Name ATF2

ATF2; CREB2; CREBP1; Cyclic AMP-dependent transcription factor ATF-2; cAMP-dependent

Alternative Names 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

The antiserum was produced against synthesized peptide derived from human ATF-2. AA

Immunogen range:441-490



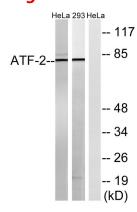
## **Background**

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. 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**



Western blot analysis of lysates from HeLa and 293 cells, using ATF-2 Antibody. The lane on the right is blocked with the synthesized peptide.

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