



Rabbit Anti-phospho-ATF2 (Thr55) antibody

SL8450R

Product Name:	phospho-ATF2 (Thr55)
Chinese Name:	磷酸化活化复制因子2抗体
Alias:	ATF2(Phospho-Thr55); ATF2 (phospho Thr55); ATF2 (phospho T55); p-ATF2 (Thr55); p-ATF2 (T51); CREB 2; HB 16;Activating Transcription Factor 2; ATF 2; Atf-2; ATF2 protein; cAMP Response Element Binding Protein 2; cAMP response element binding protein CRE BP1; cAMP-dependent transcription factor ATF-2; cAMP-responsive element-binding protein 2; CRE BP1; CRE-BP; CREB 2; CREB2; CREBP1; Cyclic AMP dependent transcription factor ATF 2; Cyclic AMP-responsive; ATF2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	56kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human ATF2 around the phosphorylation site of Thr55:TP(p-T)RF
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

This gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. 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. Several alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jan 2012].

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 CRE preferentially over the 12-O-tetradecanoylphorbol-13-acetate response elements (TRES) as part of an ATF2/JUN complex.

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.

Subcellular Location:

Nucleus.

Tissue Specificity:

Abundant expression seen in the brain.

Post-translational modifications:

Phosphorylation of Thr-69 by MAPK14 and MAPK11, and at Thr-71 by MAPK1/ERK2, MAPK3/ERK1, MAPK11, MAPK12 and MAPK14 in response to external stimulus like insulin causes increased transcriptional activity. Phosphorylated by PLK3 following hyperosmotic stress. Also phosphorylated and activated by JNK and CaMK4.

Similarity:

Belongs to the bZIP family. ATF subfamily.
Contains 1 bZIP domain.
Contains 1 C2H2-type zinc finger.

SWISS:

P15336

Gene ID:

1386

Database links:

Product Detail:

[Entrez Gene: 1386](#)Human

[Entrez Gene: 100047997](#)Mouse

[Entrez Gene: 11909](#)Mouse

[Entrez Gene: 81647](#)Rat

[Olim: 123811](#)Human

[SwissProt: P15336](#)Human

[SwissProt: P16951](#)Mouse

[SwissProt: Q00969](#)Rat

[Unigene: 592510](#)Human

[Unigene: 209903](#)Mouse

[Unigene: 9825](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.