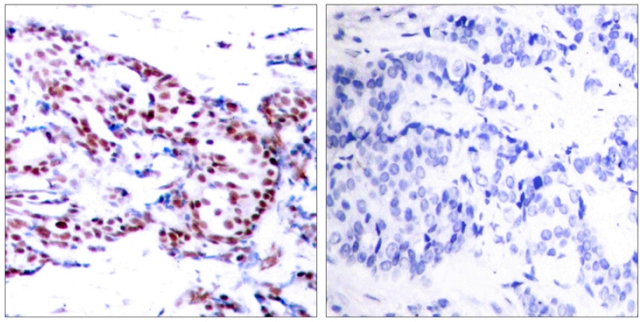
ATF-2 Polyclonal Antibody

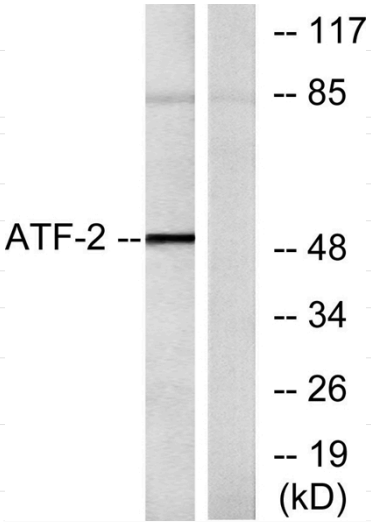
Catalog No	YP-Ab-01553
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;IP;ELISA
Gene Name	ATF2
Immunogen	The antiserum was produced against synthesized peptide derived from human ATF2. AA range:38-87
Specificity	ATF-2 Polyclonal Antibody detects endogenous levels of ATF-2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. Immunoprecipitation: 2-5 ug/mg lysate. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CREB-2;CREB2;CREB 2;cAMP-responsive element-binding protein 2;cAMP-dependent transcription factor ATF-2;ATF-2;ATF2;Cyclic AMP-dependent transcription factor ATF-2;CREBP1;Activating transcription factor 2;Cyclic AMP-responsive element-binding protein 2;cAMP-responsive element-binding pro
Observed Band	52kD
Calculated Molecular Weight	52kD
Cell Pathway	Nucleus. Cytoplasm. Mitochondrion outer membrane. Shuttles between the cytoplasm and the nucleus and heterodimerization with JUN is essential for the nuclear localization. Localization to the cytoplasm is observed under conditions of cellular stress and in disease states. Localizes at the mitochondrial outer membrane in response to genotoxic stress. Phosphorylation at Thr-52 is required for its nuclear localization and negatively regulates its mitochondrial localization. Co-localizes with the MRN complex in the IR-induced foci (IRIF).
Tissue Specificity	Ubiquitously expressed, with more abundant expression in the brain.
Function	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 throu
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
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



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 HeLa cells, using ATF2 Antibody. The lane on the right is blocked with the synthesized peptide.