

Product datasheet for **AP02331PU-S**

ATF2 pThr69/51 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Immunohistochemistry on paraffin sections: 1/50 - 1/100. Western Blot: 1/500; Incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0,1% Tween-20 at 4°C with gentle shaking, overnight. Immunofluorescence: 1/100 - 1/200.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human ATF-2 around the phosphorylation site of threonine 69 or 51 (D-Q-TP-P-T).
Specificity:	ATF-2 (phospho-Thr69or51) antibody detects endogenous levels of ATF-2 only when phosphorylated at threonine 69 or 51.
Formulation:	Phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl containing 0.02% Sodium Azide as preservative and 50% glycerol as stabilizer State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Immunoaffinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	activating transcription factor 2
Database Link:	Entrez Gene 1386 Human P15336



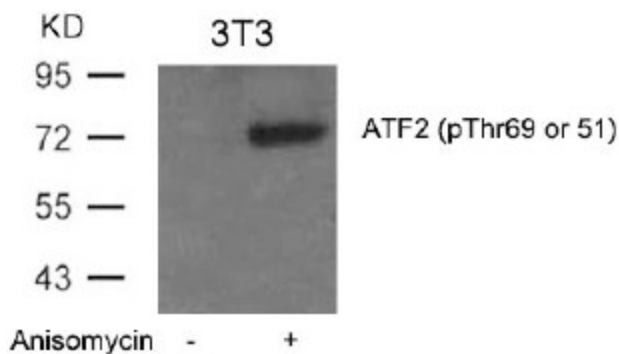
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Background:

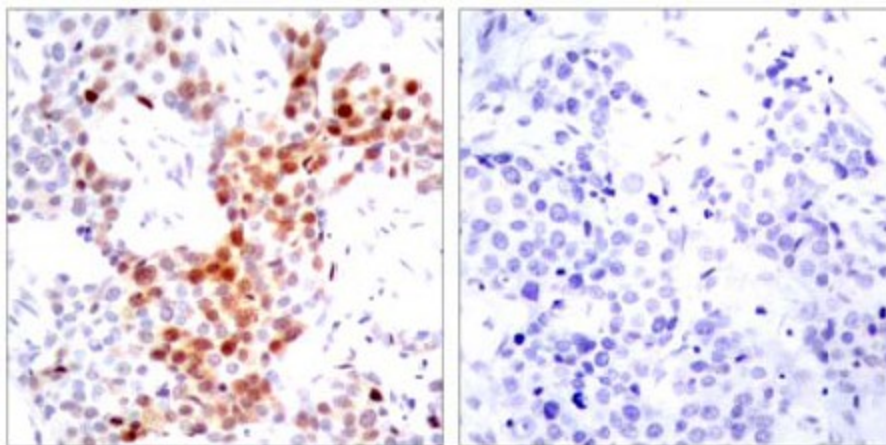
ATF2 (Activating Transcription Factor 2, CREBP, HB16, CREB2, TREB7) is a member of the ATF/CREB family of basic region leucine zipper DNA binding proteins that regulates transcription by binding to a consensus cAMP response element (CRE) in the promoter of various viral and cellular genes. Many of these genes are important in cell growth and differentiation, and in stress and immune responses. ATF2 is a nuclear protein that binds DNA as a dimer and can form dimers with members of the ATF/CREB and Jun/Fos families. It is a stronger activator as a heterodimer with cJun than as a homodimer. Several isoforms of ATF2 arise by differential splicing. The stable native full length ATF2 is transcriptionally inactive as a result of an inhibitory direct intramolecular interaction of its carboxy terminal DNA binding domain with the amino terminal transactivation domain. Following dimerization ATF2 becomes a short lived protein that undergoes ubiquitination and proteolysis, seemingly in a protein phosphatase-dependent mechanism. Stimulation of the transcriptional activity of ATF2 occurs following cellular stress induced by several genotoxic agents, inflammatory cytokines, and UV irradiation. This activation requires phosphorylation of two threonine residues in ATF2 by both JNK/SAP kinase and p38 MAP kinase. ATF2 is abundantly expressed in brain.

Synonyms:

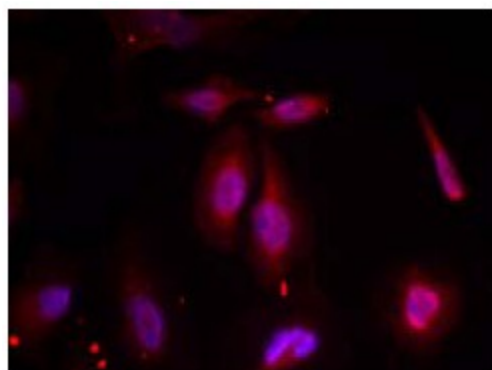
ATF-2, CREB2, CREBP1, Activating transcription factor 2, CRE-BP1, HB16, CREB-2

Product images:

Western Blot analysis of extracted from 3T3 cells untreated or treated with Anisomycin using ATF2 (pThr69 or 51) Antibody.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATF-2 (pThr69 or 51) antibody (left) or the same Antibody preincubated with blocking peptide (right)



Immunofluorescence staining of methanol-fixed HeLa cells using ATF-2 (pThr69 or 51) Antibody