

Anti-ATF2 (pT71) Antibody
Rabbit polyclonal antibody to ATF2 (pT71)
Catalog # AP60539

Specification

Anti-ATF2 (pT71) Antibody - Product Information

Application	WB
Primary Accession	P15336
Other Accession	P16951
Reactivity	Human, Mouse, Rat, Monkey, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54537

Anti-ATF2 (pT71) Antibody - Additional Information

Gene ID 1386

Other Names

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 protein 2; HB16; Histone acetyltransferase ATF2; cAMP response element-binding protein CRE-BP1

Target/Specificity

Recognizes endogenous levels of ATF2 (pT71) protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IP (1/10 - 1/100)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-ATF2 (pT71) Antibody - Protein Information

Name ATF2

Synonyms CREB2, CREBP1

Function

Transcriptional activator which regulates the transcription of various genes, including those involved in anti-apoptosis, cell growth, and DNA damage response. Dependent on its binding partner, binds to CRE (cAMP response element) consensus sequences (5'-TGACGTCA- 3') or to AP-1 (activator protein 1) consensus sequences (5'-TGACTCA- 3'). In the nucleus, contributes to global

transcription and the DNA damage response, in addition to specific transcriptional activities that are related to cell development, proliferation and death. In the cytoplasm, interacts with and perturbs HK1- and VDAC1-containing complexes at the mitochondrial outer membrane, thereby impairing mitochondrial membrane potential, inducing mitochondrial leakage and promoting cell death. The phosphorylated form (mediated by ATM) plays a role in the DNA damage response and is involved in the ionizing radiation (IR)-induced S phase checkpoint control and in the recruitment of the MRN complex into the IR-induced foci (IRIF). Exhibits histone acetyltransferase (HAT) activity which specifically acetylates histones H2B and H4 in vitro (PubMed:10821277). In concert with CUL3 and RBX1, promotes the degradation of KAT5 thereby attenuating its ability to acetylate and activate ATM. Can elicit oncogenic or tumor suppressor activities depending on the tissue or cell type.

Cellular Location

Nucleus. Cytoplasm. Mitochondrion outer membrane. Note=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 Location

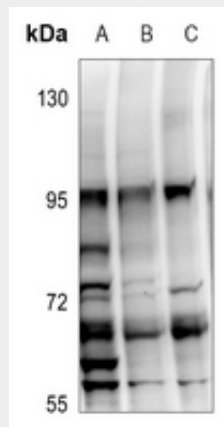
Ubiquitously expressed, with more abundant expression in the brain

Anti-ATF2 (pT71) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

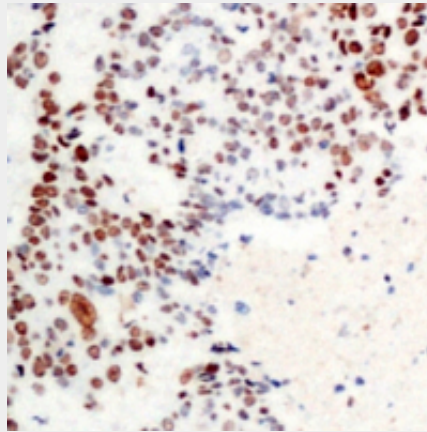
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ATF2 (pT71) Antibody - Images



Western blot analysis of ATF2 (pT71) expression in HCT116 (A), Panc1 (B), MEF (C) whole cell

lysates.



Immunohistochemical analysis of ATF2 (pT71) staining in human prostate cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-ATF2 (pT71) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human ATF2. The exact sequence is proprietary.