10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATF2 Rabbit mAb

Catalog # AP75009

Product Information

Application	WB, IHC-P, FC, IP
Primary Accession	P16951
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	52298

Additional Information

Gene ID	11909
Other Names	Atf2
Dilution	WB~~1:500-1:1000 IHC-P~~N/A FC~~1:20-1:50 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	Atf2
Function	Transcriptional activator which regulates the transcription of various genes, including those involved in anti-apoptosis, cell growth, and DNA damage response (PubMed:41570820). 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') (By similarity). 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 (By similarity). In liver, acts as a regulator of glucose metabolism downstream of OR5V1 signaling, which promotes ATF2 activation, leading to expression of carnitine palmitoyltransferase CPT1A (PubMed:41570820). 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 (By similarity). 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) (By similarity). In concert with CUL3 and RBX1, promotes the degradation of KAT5 thereby attenuating its ability to acetylate and activate ATM (By similarity). Can elicit oncogenic or tumor suppressor activities depending on the tissue or cell type (By similarity).

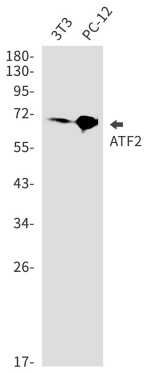
Cellular Location

Nucleus. Cytoplasm. Mitochondrion outer membrane {ECO:0000250|UniProtKB:P15336}. 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) {ECO:0000250|UniProtKB:P15336}

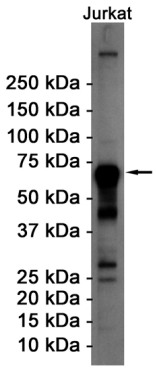
Background

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').

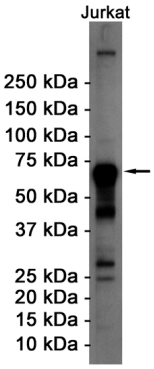
Images

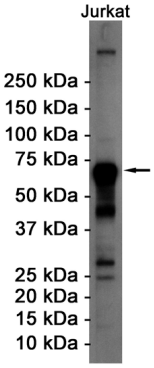


Western blot analysis of ATF2 in 3T3, PC-12 lysates using ATF2 antibody.



Western blot analysis of ATF2 in Jurkat lysates using ATF2 antibody.





Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.