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Atf2 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10613

Product Information

Application	WB
Primary Accession	Q00969
Other Accession	NM_031018, NP_112280
Reactivity	Human, Mouse, Rat, Zebrafish, Pig, Dog, Bovine
Predicted	Human, Mouse, Rat, Pig, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52287

Additional Information

Gene ID	81647
Other Names	Cyclic AMP-dependent transcription factor ATF-2, cAMP-dependent transcription factor ATF-2, 2.3.1.48, Activating transcription factor 2, cAMP response element-binding protein CRE-BP1, Atf2
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Atf2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Atf2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

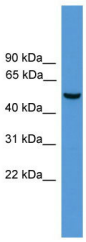
Name	Atf2
Function	Transcriptional activator which regulates the transcription of various genes, including those involved in anti-apoptosis, cell growth, and DNA damage response. Dependent on its binding partner, binds to CRE (cAMP response element) consensus sequences (5'-TGACGTCA- 3') or to AP-1 (activator 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 (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 (By similarity). 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). 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 (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:P15336}. Cytoplasm {ECO:0000250|UniProtKB:P15336}. 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}

Images



WB Suggested Anti-Atf2 Antibody Titration: .2-1 ug/ml
ELISA Titer: 1:3125
Positive Control: Rat Liver

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