

Phospho-ATF2 (Thr71) Rabbit mAb

Catalog # AP75116

Specification

Phospho-ATF2 (Thr71) Rabbit mAb - Product Information

Application WB, IP, ICC **Primary Accession** P15336 Reactivity

Human, Mouse Host Rabbit

Clonality **Monoclonal Antibody**

Calculated MW 54537

Phospho-ATF2 (Thr71) Rabbit mAb - Additional Information

Gene ID 1386

Other Names

ATF2

Dilution WB~~1/500-1/1000 IP~~N/A

ICC~~N/A

Format

Liquid

Phospho-ATF2 (Thr71) Rabbit mAb - 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

Phospho-ATF2 (Thr71) Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Phospho-ATF2 (Thr71) Rabbit mAb - Images





