

**ATF2 Antibody**  
Rabbit mAb  
Catalog # AP90104

## Specification

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### ATF2 Antibody - Product Information

|  |                        |
|--|------------------------|
| Application  | WB, IHC, ICC, IP       |
| Primary Accession  | <a href="#">P15336</a> |
| Clonality  | Monoclonal             |
| <b>Other Names</b>   |                        |
| ATF2; Activating 2; CREB2; CREBP1; Cyclic-AMP-dependent ATF-2; HB16; MXBP protein; |                        |
| Isotype  | Rabbit IgG             |
| Host   | Rabbit                 |
| Calculated MW  | 54537 Da               |

### ATF2 Antibody - Additional Information

|                              |  |
|------------------------------|--|
| Purification                 | Affinity-chromatography  |
| Immunogen                    | A synthesized peptide derived from human ATF2  |
| Description                  | This gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. This protein binds to the cAMP-responsive element (CRE), an octameric palindrome. The protein forms a homodimer or heterodimer with c-Jun and stimulates CRE-dependent transcription. The protein is also a histone acetyltransferase (HAT) that specifically acetylates histones H2B and H4 in vitro; |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.  |

### ATF2 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:<a href="http://www.uniprot.org/citations/10821277" target="\_blank">10821277</a>). 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

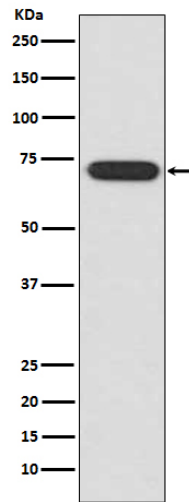
#### ATF2 Antibody - Protocols

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](#)

#### ATF2 Antibody - Images





Western blot analysis of ATF2 expression in HeLa cell lysate.