

# Anti-ATF2 Rabbit Monoclonal Antibody

Catalog # ABO13295

## Product Information

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| <b>Application</b>       | WB, IHC, IF, ICC, IP                                                                                                |
| <b>Primary Accession</b> | <a href="#">P15336</a>                                                                                              |
| <b>Host</b>              | Rabbit                                                                                                              |
| <b>Isotype</b>           | Rabbit IgG                                                                                                          |
| <b>Reactivity</b>        | Human                                                                                                               |
| <b>Clonality</b>         | Monoclonal                                                                                                          |
| <b>Format</b>            | Liquid                                                                                                              |
| <b>Description</b>       | Anti-ATF2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human. |

## Additional Information

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| <b>Gene ID</b>                  | 1386                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Other Names</b>              | 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, cAMP response element-binding protein CRE-BP1, ATF2, CREB2, CREBP1                                                                                                                                                                                                                                                   |
| <b>Calculated MW</b>            | 54537                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Application Details</b>      | WB 1:500-1:2000<br>IHC 1:50-1:100<br>ICC/IF 1:50-1:100<br>IP 1:30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Subcellular Localization</b> | Nucleus. Cytoplasm. Mitochondrion outer membrane. 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). |
| <b>Tissue Specificity</b>       | Ubiquitously expressed, with more abundant expression in the brain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Clone Names</b>              | Clone: IA-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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| <b>Immunogen</b>    | A synthesized peptide derived from human ATF2                                                                                              |
| <b>Purification</b> | Affinity-chromatography                                                                                                                    |
| <b>Storage</b>      | Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles. |

## Protein Information

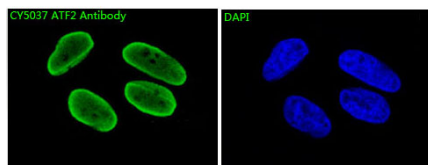
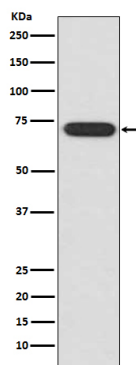
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| <b>Name</b>              | ATF2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>          | CREB2, CREBP1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Function</b>          | 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="#">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. |
| <b>Cellular Location</b> | 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Tissue Location</b>   | Ubiquitously expressed, with more abundant expression in the brain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Images

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Western blot analysis of ATF2 expression in HeLa cell lysate.



Immunofluorescent analysis of HeLa cells, using ATF2 Antibody.

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