

## Rabbit anti-Human ATF2 Monoclonal Antibody | anti-ATF2 antibody

Anti-Phospho-ATF2 (T71) Rabbit Monoclonal Antibody

| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                                                               |
|-----------|--------|------------|----------------------------------------------------------------------------|
| AAA124534 | Rabbit | Human      | Western Blot, Immunocytochemistry, Immunofluorescence, Immunoprecipitation |

### PRODUCT SYNONYMS

ATF2; Monoclonal Antibody; Anti-Phospho-ATF2 (T71) Rabbit Monoclonal Antibody; Cyclic AMP-dependent transcription factor ATF-2; cAMP-dependent transcription factor ATF-2; 2.3.1.48; Activating transcription factor 2; Cyclic AMP-responsive element-binding protein 2; CREB-2; cAMP-responsive element-binding protein 2; HB16; Histone acetyltransferase ATF2; cAMP response element-binding protein CRE-BP1; CREB2; CREBP1; anti-ATF2 antibody

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Purity/Purification                            | Affinity-chromatography                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Form/Format                                    | Liquid<br>Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Sequence Length                                | 144                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Applicable Applications for anti-ATF2 antibody | WB (Western Blot), ICC (Immunocytochemistry), IF (Immunofluorescence), IP (Immunoprecipitation)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Immunogen                                      | A synthesized peptide derived from human Phospho-ATF2 (T71)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Subcellular Localization                       | 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). |
| Tissue Specificity                             | Ubiquitously expressed, with more abundant expression in the brain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Preparation and Storage                        | Store at -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.                                                                                                                                                                                                                                                                                                                                                                         |

IMAGES



WB (Western Blot)

Western blot analysis of Phospho-ATF2 (T71) expression in (1) HeLa cell lysate; (2) HeLa cell lysate treated with Anisomycin (AAA124534). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ATF2 monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ATF2

ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-ATF2 antibody | 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. 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. |
| Product Categories/Family for anti-ATF2 antibody   | Epigenetics and Nuclear Signaling; Transcription; Domain Families; HLH/Leucine Zipper; Immunology; Innate Immunity; TLR Signaling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                             |
|----------------------------------|-------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 368711269                                                                                                   |
| NCBI GeneID                      | 1386                                                                                                        |
| NCBI Accession #                 | NP_001243019.1                                                                                              |
| NCBI GenBank Nucleotide #        | NM_001256090.1                                                                                              |
| UniProt Accession #              | P15336; Q13000; Q3B7B7; Q4ZFU9; Q53RY2; Q8TAR1; A1L3Z2; A4D7U4; A4D7U5; A4D7V1; D3DPE9; G8JLM5              |
| NCBI Official Full Name          | cyclic AMP-dependent transcription factor ATF-2 isoform 1                                                   |
| NCBI Official Synonym Full Names | activating transcription factor 2                                                                           |
| NCBI Official Symbol             | ATF2                                                                                                        |
| NCBI Official Synonym Symbols    | HB16; CREB2; TREB7; CREB-2; CRE-BP1                                                                         |
| NCBI Protein Information         | cyclic AMP-dependent transcription factor ATF-2                                                             |
| UniProt Protein Name             | Cyclic AMP-dependent transcription factor ATF-2                                                             |
| UniProt Gene Name                | ATF2                                                                                                        |
| UniProt Synonym Gene Names       | CREB2; CREBP1; cAMP-dependent transcription factor ATF-2; CREB-2; cAMP-responsive element-binding protein 2 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)

Online datasheet: <https://stage.aaabiotech.com/monoclonal/atf2-antibody-western-blot-immunocytochemistry-immunofluorescence-immunoprecipitation-elisa/124534>