ATF-2 (Ab-472) Antibody

Catalog No: #33275

Package Size: #33275-1 50ul #33275-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

| Description           |  |
|-----------------------|--|
| Product Name          | ATF-2 (Ab-472) Antibody  |
| Host Species          | Rabbit   |
| Clonality             | Polyclonal   |
| Purification          | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific |
|                       | immunogen.   |
| Applications          | WB   |
| Species Reactivity    | Hu   |
| Specificity           | The antibody detects endogenous levels of total ATF-2 protein.   |
| Immunogen Type        | Peptide  |
| Immunogen Description | Synthesized non-phosphopeptide derived from human ATF-2 around the phosphorylation site of serine 472      |
|                       | (A-L-S(p)-Q-I).  |
| Target Name           | ATF-2  |
| Other Names           | Activating 2; ATF2; cAMP response element binding protein CRE- BP1; CREB2; CREBP1                          |
| Accession No.         | Swiss-Prot: P15336NCBI Gene ID: 1386   |
| Uniprot               | P15336   |
| GenelD                | 1386;  |
| SDS-PAGE MW           | 70kd   |
| Concentration         | 1.0mg/ml   |
| Formulation           | Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide    |
|                       | and 50% glycerol.  |
| Storage               | Store at -20°C   |
|                       |  |

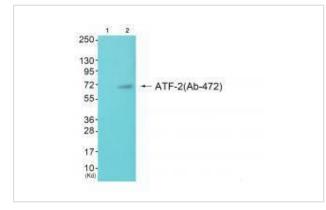
## **Application Details**

Western blotting: 1:500~1:3000

## Images

|        | HeLa 293 HeLa |
|--------|---------------|
|        | 117           |
| ATF-2- | 85            |
|        | 48            |
|        | 34            |
|        | 26            |
|        | 19            |
|        | (kD)          |

Western blot analysis of extracts from HeLa cells and 293 cells, using ATF-2 (Ab-472) antibody #33275.



Western blot analysis of extracts from JK cells (Lane 2), using ATF-2 (Ab-472) antiobdy #33275. The lane on the left is treated with synthesized peptide

## Background

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.

Maekawa T., EMBO J. 8:2023-2028(1989). Yang L., J. Immunol. 158:2522-2525(1997). Hillier L.W., Nature 434:724-731(2005).

Note: This product is for in vitro research use only