

# Datasheet for ABIN1713945

## anti-ATF2 antibody (pThr51, pThr53)





## Overview

| Quantity:            | 100 μL  |
|----------------------|---|
| Target:              | ATF2  |
| Binding Specificity: | pThr51, pThr53  |
| Reactivity:          | Human   |
| Host:                | Rabbit  |
| Clonality:           | Polyclonal  |
| Conjugate:           | This ATF2 antibody is un-conjugated   |
| Application:         | Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunocytochemistry (ICC) |

## **Product Details**

| Immunogen:            | KLH conjugated synthetic phosphopeptide derived from mouse ATF2 around the phosphorylation site of Thr51 + Thr53 |
|-----------------------|--|
| Isotype:              | IgG  |
| Cross-Reactivity:     | Human  |
| Predicted Reactivity: | Mouse,Rat  |
| Purification:         | Purified by Protein A.   |

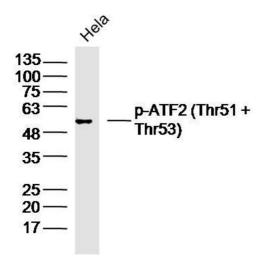
## **Target Details**

| Target:             | ATF2   |
|---------------------|--|
| Alternative Name:   | ATF2 + (ATF2 Products)   |
| Background:         | Synonyms: ATF2 phospho T51 + T53, p-ATF2 phospho T51 + T53, ATF2 phospho Thr51 +                 |
|                     | Thr53, p-ATF2 phospho Thr51 + Thr53, CREB 2, HB 16,Activating Transcription Factor 2, ATF 2      |
|                     | Atf-2, ATF2 protein, cAMP Response Element Binding Protein 2, cAMP response element              |
|                     | binding protein CRE BP1, cAMP-dependent transcription factor ATF-2, cAMP-responsive              |
|                     | element-binding protein 2, CRE BP1, CRE-BP, CREB 2, CREB2, CREBP1, Cyclic AMP dependent          |
|                     | transcription factor ATF 2, Cyclic AMP-responsive, ATF2_HUMAN.                                   |
|                     | Background: ATF2 is a member of the ATF/CREB family of basic region leucine zipper DNA           |
|                     | binding proteins that regulates transcription by binding to a consensus cAMP response elemer     |
|                     | (CRE) in the promoter of various viral and cellular genes. Many of these genes are important in  |
|                     | cell growth and differentiation, and in stress and immune responses. ATF2 is a nuclear protein   |
|                     | that binds DNA as a dimer and can form dimers with members of the ATF/CREB and Jun/Fos           |
|                     | families. It is a stronger activator as a heterodimer with cJun than as a homodimer. Several     |
|                     | isoforms of ATF2 arise by differential splicing. The stable native full length ATF2 is           |
|                     | transcriptionally inactive as a result of an inhibitory direct intramolecular interaction of its |
|                     | carboxy terminal DNA binding domain with the amino terminal transactivation domain.              |
|                     | Following dimerization ATF2 becomes a short lived protein that undergoes ubiquitination and      |
|                     | proteolysis, seemingly in a protein phosphatase-dependent mechanism. Stimulation of the          |
|                     | transcriptional activity of ATF2 occurs following cellular stress induced by several genotoxic   |
|                     | agents, inflammatory cytokines, and UV irradiation. This activation requires phosphorylation of  |
|                     | two threonine residues in ATF2 by both JNK/SAP kinase and p38 MAP kinase. ATF2 is                |
|                     | abundantly expressed in brain.   |
| Gene ID:            | 11909  |
| Pathways:           | MAPK Signaling, RTK Signaling, Thyroid Hormone Synthesis, Activation of Innate immune            |
|                     | Response, Chromatin Binding, Myometrial Relaxation and Contraction, Synaptic Membrane,           |
|                     | Tube Formation, Toll-Like Receptors Cascades   |
| Application Details |  |
| Application Notes:  | WB 1:300-5000  |
|                     | ELISA 1:500-1000   |
|                     | IHC-P 1:200-400  |
|                     | IHC-F 1:100-500  |
|                     | IF(IHC-P) 1:50-200   |

## **Application Details**

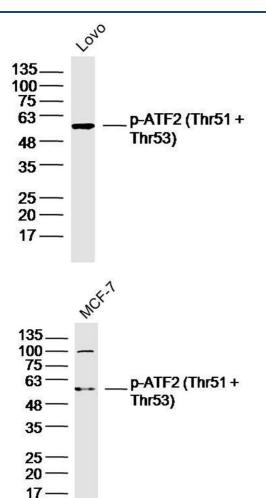
|                    | IF(IHC-F) 1:50-200  |
|--------------------|---|
|                    | IF(ICC) 1:50-200  |
|                    | ICC 1:100-500   |
| Restrictions:      | For Research Use only   |
| Handling           |   |
| Format:            | Liquid  |
| Concentration:     | 1 μg/μL   |
| Buffer:            | 0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.               |
| Preservative:      | ProClin   |
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be |
|                    | handled by trained staff only.  |
| Storage:           | 4 °C,-20 °C   |
| Storage Comment:   | Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.     |
| Expiry Date:       | 12 months   |
|                    |   |

## **Images**



## **Western Blotting**

**Image 1.** Hela lysates probed with p-ATF2 (Thr51 + Thr53) Polyclonal Antibody, Unconjugated at 1:300 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at 1:10000 for 60 min at 37°C.



**Image 2.** LOVO lysates probed with p-ATF2 (Thr51 + Thr53) Polyclonal Antibody, Unconjugated at 1:300 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at 1:10000 for 60 min at 37°C.

**Image 3.** MCF-7 lysates probed with p-ATF2 (Thr51 + Thr53) Polyclonal Antibody, Unconjugated at 1:300 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at 1:10000 for 60 min at 37°C.