

## Anti-ATF2 Antibody Picoband™

Catalog Number: A00916-2

### About ATF2

ATF2, also known as Activating transcription factor 2, is a protein that in humans is encoded by the ATF2 gene. It is mapped to 2q31.1. 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, thus, it may represent a class of sequence-specific factors that activate transcription by direct effects on chromatin components. Additional transcript variants have been identified but their biological validity has not been determined.

### Overview

Product Name	Anti-ATF2 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ATF2 Antibody Picoband™ catalog # A00916-2. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P15336

### Technical Details

Immunogen	E.coli-derived human ATF2 recombinant protein (Position: M1-H454).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat</p> <p>Flow Cytometry, 1-3 ug/1x10<sup>6</sup> cells, Human</p> <p>Direct ELISA, 0.1-0.5 ug/ml, Human</p>

## Anti-ATF2 Antibody Picoband™ (A00916-2) Images

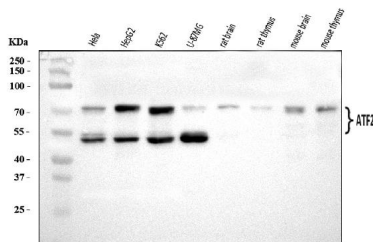


Figure 1. Western blot analysis of ATF2 using anti-ATF2 antibody (A00916-2).

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 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,  
Lane 2: human HepG2 whole cell lysates,  
Lane 3: human K562 whole cell lysates,  
Lane 4: human U-87MG whole cell lysates,  
Lane 5: rat brain tissue lysates,  
Lane 6: rat thymus tissue lysates,  
Lane 7: mouse brain tissue lysates,  
Lane 8: mouse thymus tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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 antigen affinity purified polyclonal antibody (Catalog # A00916-2) at 0.5 ug/mL overnight at 4°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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ATF2 at approximately 75 kDa. The expected band size for ATF2 is at 55 kDa.

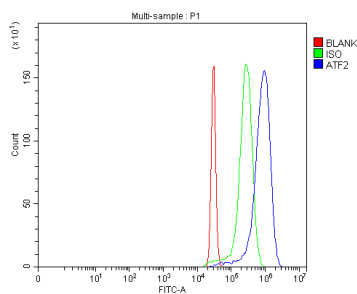


Figure 2. Flow Cytometry analysis of Hela cells using anti-ATF2 antibody (A00916-2).

Overlay histogram showing Hela cells stained with A00916-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ATF2 Antibody (A00916-2, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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