

Basic Information

Product Name	Anti-ATF2 Antibody
Gene Name	ATF2
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, FCM, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human ATF2 recombinant protein (Position: M1-H454).
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	65-75 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA):1:100-1000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

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.

Selected Validation Data

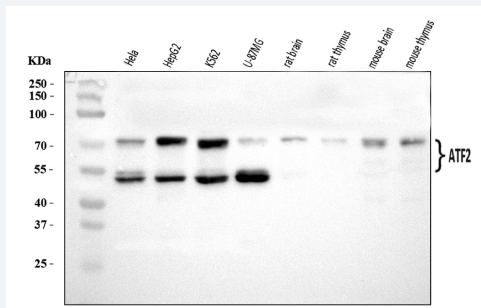


Figure 1. Western blot analysis of anti- ATF2 Antibody (A00916-2). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates.

Lane 2: HepG2 whole cell lysates,

Lane 3: K562 whole cell lysates,

Lane 4: 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.

Use rabbit anti- ATF2 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ATF2 at approximately 65KD-75KD. The expected band size for ATF2 is at 55KD.

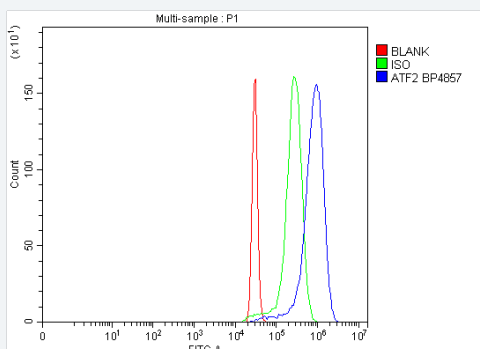


Figure 2. Flow Cytometry analysis of HeLa cells using anti-ATF2 antibody (A00916-2).

Overlay histogram showing HeLa cells stained with A00916-2 (Blue line).

To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ATF2 Antibody (A00916-2) at 1:100 dilution for 30 min at 20°C.

DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.