

Datasheet for ABIN6655678
anti-ATF6 antibody (N-Term)

3 Images



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Overview

Quantity:	100 µg
Target:	ATF6
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ATF6 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF), Flow Cytometry (FACS), Chromatin Immunoprecipitation (ChIP)

Product Details

Purpose:	ATF6 Antibody
Immunogen:	ATF6 Antibody was produced in mice by repeated immunizations with the partial protein of human ATF6 at the n-terminus of the protein.
Clone:	70B1413-1
Isotype:	IgG1 kappa
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with Anti-ATF6 from Grouper (Fish), Hamster, Human, Mouse, Rabbit, and Rat based on 100 % homology with the immunizing sequence.
Purification:	Anti-ATF6 Antibody was purified by Protein G chromatography.

Target Details

Target: ATF6

Alternative Name: ATF6 ([ATF6 Products](#))

Background: Synonyms: Activating transcription factor 6 alpha

Background: Anti-ATF6 antibody detects human ATF6. ATF6 is a constitutively expressed, endoplasmic reticulum (ER) membrane-anchored transcription factor. ATF6 is a key transcriptional activator of the unfolded protein response (UPR), which allows mammalian cells to maintain cellular homeostasis when they are subjected to environmental and physiological stresses that target the ER. The C-terminus of ATF6 is located in the ER lumen and its N-terminal DNA binding domain faces the cytosol. ATF6 plays a key role in the ER stress response by transmitting the ER stress signal across the ER membrane into the nucleus. The induction of new gene expression by ATF6 is an important aspect of the ER stress response. In response to certain stress conditions, ATF6 translocates from the ER to the Golgi. The 90 kDa full-length ATF6 is processed within the Golgi to its active 50 kDa form through sequential cleavage by site-1 and site-2 proteases (S1P and S2P). Proteolytic activation of ATF6 in the ER stress response is a mechanism to regulate membrane-bound factors, and is referred to as regulated intramembrane proteolysis. The N-terminal active ATF6 translocates to the nucleus where it binds to ER stress-response elements in ER stress-response genes (ERSRGs). ATF6 is a potent transcriptional activator of ERSRGs. The fully glycosylated form of ATF6, a 670 amino acid protein, exhibits an electrophoretic mobility of ~90 kDa in denaturing SDS-gels, in part because of the glycosylated modifications. ATF6 has 3 consensus sites for N-linked glycosylation and exists constitutively as a glycosylated protein. Differentially glycosylated ATF6 forms may result from mutations or experimental treatment. Anti-ATF6 antibody is ideal for investigators involved in apoptosis research.

Gene Name: ATF6

Gene ID: 22926

NCBI Accession: [NP_031374](#)

UniProt: [P18850](#)

Pathways: [ER-Nucleus Signaling, Unfolded Protein Response](#)

Application Details

Application Notes: Optional[Neutralization_Dilution]: 1-5 µg/mL

Comment: Anti-ATF6 antibody is tested for use in WB, CHIP, Flow, Flow-IC, ICC/IF, IHC-Fr, IHC-P, and IP. Expect a band approximately 90 kDa on specific lysates. Specific conditions for reactivity

Application Details

should be optimized by the end user.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer: 0.05 % BSA
Preservative: 0.05 % (w/v) Sodium Azide

Preservative: Sodium azide

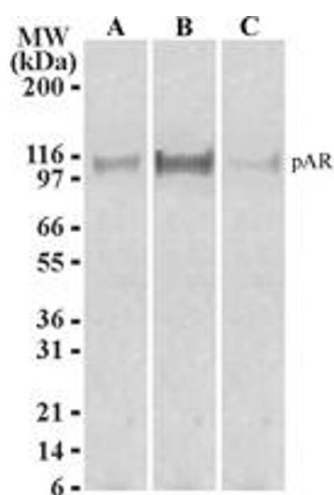
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C,-20 °C

Storage Comment: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

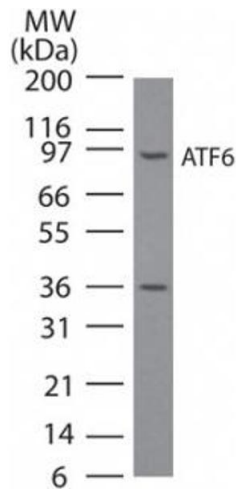
Expiry Date: 12 months

Images



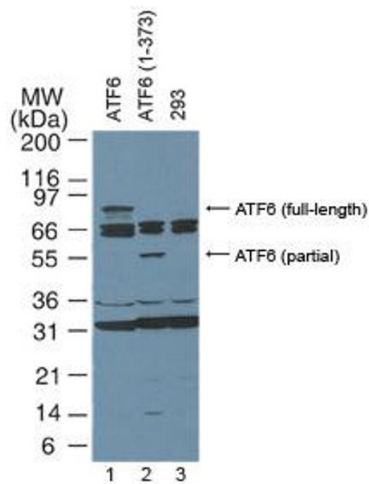
Western Blotting

Image 1. ATF6 Western Blot. Western Blot of Mouse Anti-ATF6 antibody in mouse liver tissue. Lane A: 20 µg of whole mouse liver lysate. Lane B: 20 µg of total ER fraction. Lane C: 20 µg of rough ER fraction. Load: 30 µg per lane. Primary antibody: ATF6 antibody at 3 µg/ml for overnight at 4°C and 0.25 µg/ml of anti-GAPDH loading control. Secondary antibody: mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~90 kDa for ATF6. Other band(s): Under glycosylated or cleaved/active ATF6.



Western Blotting

Image 2. ATF6 Western Blot. Western Blot of Mouse Anti-ATF6 antibody. Lane A: NIH3T3 lysate. Load: 30 µg per lane. Primary antibody: ATF6 antibody at 3 µg/ml for overnight at 4°C. Secondary antibody: mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~90 kDa for ATF6 antibody. Other band(s): possible breakdown/cleavage product.



Western Blotting

Image 3. ATF6 Western Blot. Western Blot of Mouse Anti-ATF6 antibody. Lane 1: 293 cells transfected with full-length ATF6. Lane 2: 293 cells transfected with partial length ATF6. Lane 3: Untransfected 293 cells. Load: 30 µg per lane. Primary antibody: ATF6 antibody at 4 µg/ml for overnight at 4°C. Secondary antibody: mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~90 kDa for ATF6. Other band(s): none.