

Datasheet for 200-301-H56**ATF6 Antibody****Overview**

Description:	Anti-ATF6 (MOUSE) Monoclonal Antibody - 200-301-H56
Item No.:	200-301-H56
Size:	100 µg
Applications:	ChIP, FC, IF, IHC, IP, WB
Reactivity:	Human, Mouse
Host Species:	Mouse

Product Details**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.

Synonyms:	Activating transcription factor 6 alpha
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	70B1413.1

Format: IgG1

Target Details

Gene Name:	ATF6
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	ATF6 Antibody was produced in mice by repeated immunizations with the partial protein of human ATF6 at the n-terminus of the protein.
Purity/Specificity:	Anti-ATF6 Antibody was purified by Protein G chromatography. 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. Cross-reactivity with Anti-ATF6 from other sources has not been determined.
Relevant Links:	• UniProtKB - P18850 • NCBI - NP_031374.2 • GeneID - 22926

Application Details

Tested Applications:	ChIP, FC, IF, IHC, IP, WB
Application Note:	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 should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	1-5 µg/mL

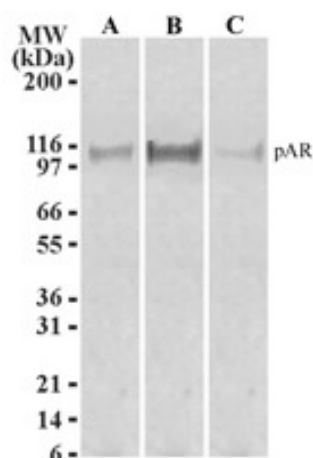
Formulation

Physical State:	Liquid
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide

Shipping & Handling

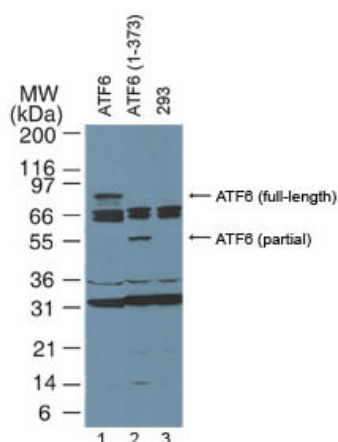
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



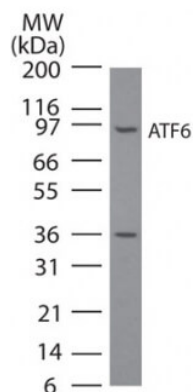
Western Blot

Western Blot of Mouse Anti-Androgen Receptor antibody. Lane A: LNCaP untreated cells. Lane B: LNCaP cells treated with 100ng IGF-1 for 4hrs. Lane C: LNCaP cells incubated with 20µm LY294002 for 30min prior to treatment with 100ng IGF-1 for 4hrs. Load: 30 µg per lane. Primary antibody: Androgen Receptor antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~110 kDa for Androgen Receptor antibody. Other band(s): none.



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: IRDye800™ 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.

**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: IRDye800™ 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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.