

Datasheet for 600-401-GU9S**ATF6 Antibody****Overview**

Description:	Anti-ATF6 (RABBIT) Antibody - 600-401-GU9S
Item No.:	600-401-GU9S
Size:	25 µL
Applications:	ELISA, IF, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	ATF6 belongs to the bZIP (basic-leucine zipper domain transcription factor) family. Activating target genes for the unfolded protein response during endoplasmic reticulum stress. Embedded in the endoplasmic reticulum, it functions as an ER stress sensor/stress transducer. Following stress-induced proteolysis it functions as a nuclear transcription factor via a cis-acting ER stress response element (ERSE) that is present in the promoters of genes encoding ER chaperones. Binds DNA on the 5'-CCAC[GA]-3' half of the ER stress response element (ERSE) (5'-CCAAT-N(9)-CCAC[GA]-3') and of ERSE II (5'-ATTGG-N-CCACG-3'). Binding to ERSE requires binding of NF-Y to ERSE. ATF6 could also be involved in the activation of transcription by the serum response factor. This protein may play a role in the development of the foveal and cone function in the retina. Therefore, attributing to disorders such as achromatopsia, blindness, nystagmus, myopia, cataracts and more. Anti-ATF6 Antibody is useful for researchers studying eye development, protein folding and processing, Endoplasmic Reticulum Stress Pathways, Glucose and Energy Metabolism Research.
Synonyms:	rabbit anti-ATF6 Antibody, Activating Transcription Factor 6, rabbit anti-ATF-6 Antibody, Cyclic AMP-dependent transcription factor ATF-6 alpha, Activating transcription factor 6 alpha, ATF6 alpha
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATF6
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Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-ATF6 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a N-Term portion of human ATF6 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against human ATF6. This product was affinity purified from monospecific antiserum by immunoaffinity purification. Blast analysis of the sequence of the immunogen shows 100% identity with human and 80% identity to rat.
Relevant Links:	• GeneID - 22926 • NCBI - NP_031374.2 • UniProtKB - P18850

Application Details

Tested Applications:	ELISA, IF, WB
Application Note:	Anti-ATF6 Antibody has been tested in Western Blot, IF and ELISA. Recombinant ATF6 protein positive control was used for western blotting. Expect a band at 74.5kDa in western blot using appropriate lysates or recombinant protein. Antibody tested positive in U251 cells (W09-001-GY4) in Immunofluorescence. Although not tested, this antibody is likely functional in immunohistochemistry, flow cytometry, and immunoprecipitation.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	5.0 µg/ml
FC:	User Optimized
IF:	10 µg/ml
IHC:	1:200
IP:	User Optimized
WB:	0.5 µg/ml

Formulation

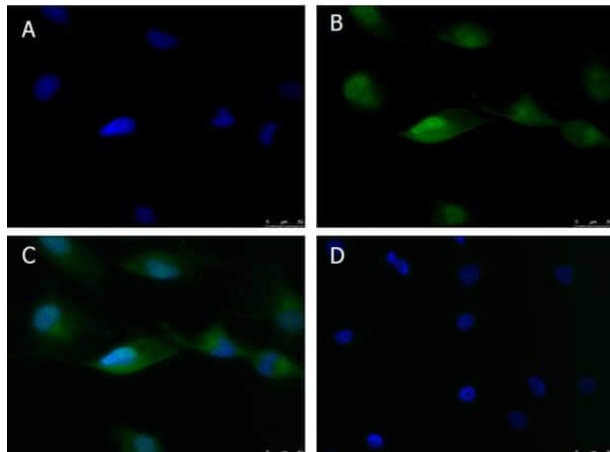
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm

Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

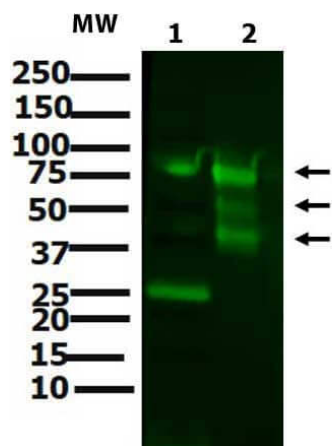
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence Microscopy of Rabbit anti-ATF6 antibody. Tissue: U-251 cells p/n (W09-001-GY4). Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ATF6 antibody at 10 µg/mL overnight at 4°C. Secondary antibody: Anti-RABBIT IgG DyLight™ 488 Conjugated Preadsorbed (p/n 611-741-127) at 5 ug/ml for 2 h at RT. Localization: ATF6 is cell membrane and cytoplasmic. Staining: ATF6 as green fluorescent signal with DAPI (blue) nuclear counterstain.



Western Blot

Western Blot of Rabbit anti-ATF6 antibody. Lane 1: MW ladder. Lane 2: ATF6 rProtein. Load: 1 µg per lane. Primary antibody: ATF6 antibody at 1:2000 for overnight at 4°C. Secondary antibody: rabbit secondary HRP antibody (p/n 611-741-127) at 1:10,000 for one hour at RT. Block: BlockOut p/n (MB-073) two hours 4°C. Predicted/Observed size: ~74.5 kDa for ATF6. Other: 50, 37 kDa.

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.