

Datasheet for 600-401-Y72**ATF6 Antibody****Overview**

Description:	Anti-ATF6 (RABBIT) Antibody - 600-401-Y72
Item No.:	600-401-Y72
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Disruptions of protein folding and maturation in the endoplasmic reticulum (ER) result in the activation of the unfolded protein response (UPR), an integrated cellular signaling pathway that transmits information from the ER lumen to the cytoplasm and nucleus. Activating transcription factor 6 (ATF6) as well as the ER-transmembrane protein kinases IRE1p and PERK are the major transducers of the UPR. ATF6 is an ER transmembrane protein that is normally bound to the ER chaperone GRP78, but upon ER stress is released from GRP78 and proteolytically cleaved to yield a cytosolic fragment which then migrates to the nucleus, and together with the transcription factor XBP-1, activates transcription of UPR-responsive genes. ATF6 has two isoforms (ATF6a and ATF6b); only ATF6a is recognized by this antibody.
Synonyms:	ATF6 Antibody, ATF6A, Cyclic AMP-dependent transcription factor ATF-6 alpha, Activating transcription factor 6 alpha, cAMP-dependent transcription factor ATF-6 alpha
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATF6
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ATF6 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the C-terminus of human ATF6.
Purity/Specificity:	Anti-ATF6 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ATF6 from other sources has not been determined.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P18850• GeneID - 22926• NCBI - NP_031374

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ATF6 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry, Immunohistochemistry, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 75 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:10000
IF:	10 µg/mL
IHC:	5 µg/mL
WB:	0.5 - 1 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

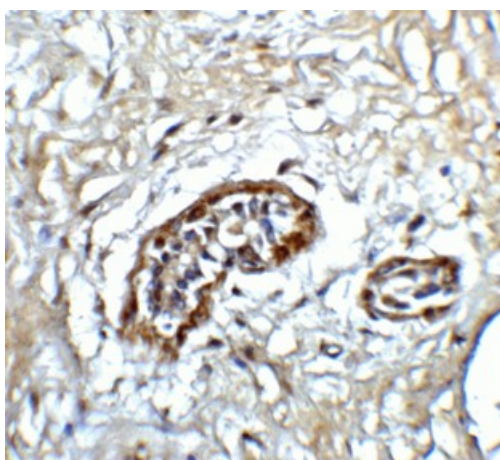
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

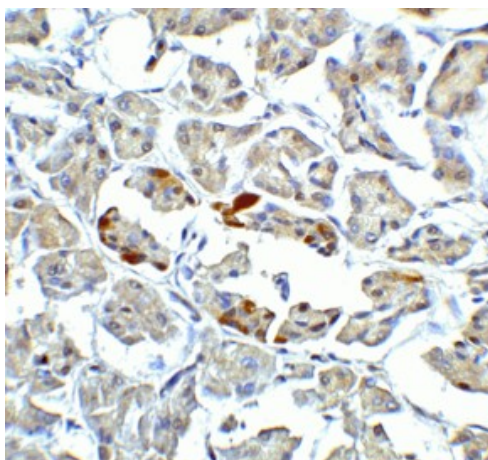
Expiration: Expiration date is one (1) year from date of receipt.

Images



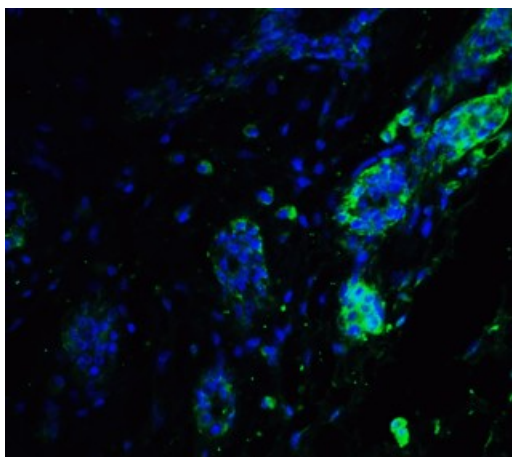
Immunohistochemistry

Immunohistochemistry of ATF6 in human breast tissue with ATF6 antibody at 5 µg/ml.

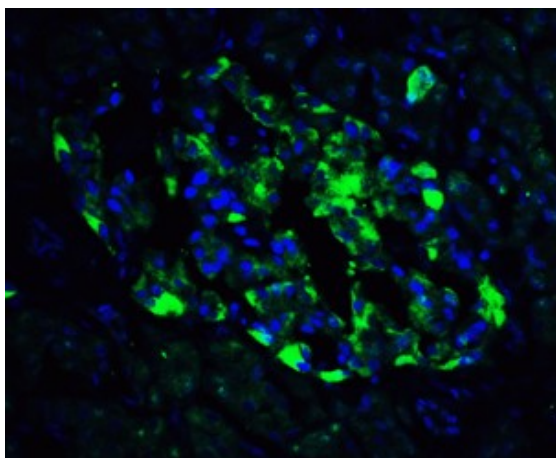


Immunohistochemistry

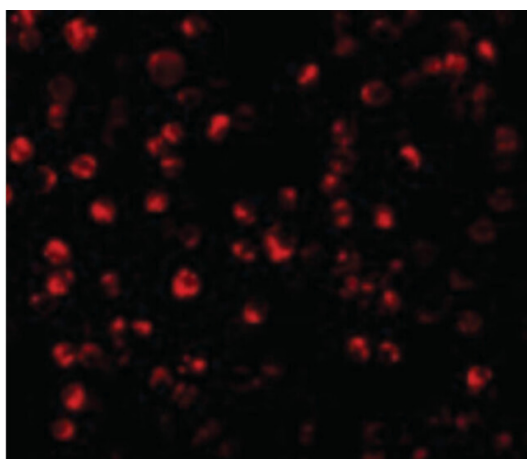
Immunohistochemistry of ATF6 in human pancreas tissue with ATF6 antibody at 5 µg/ml.

**Immunofluorescence Microscopy**

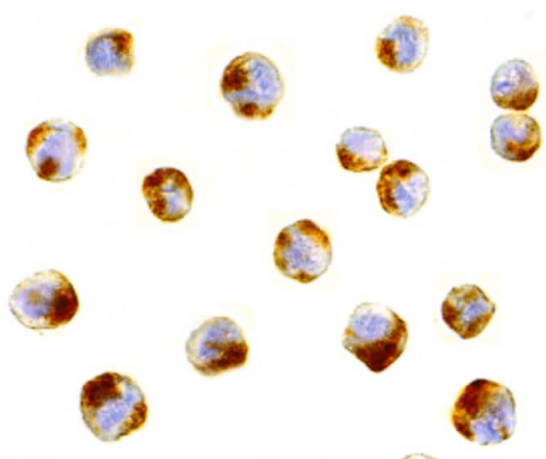
Immunofluorescence of ATF6 in human breast tissue with ATF6 antibody at 20 µg/ml. Green: ATF6 Antibody. Blue: DAPI staining.

**Immunofluorescence Microscopy**

Immunofluorescence of ATF6 in human pancreas tissue with ATF6 antibody at 20 µg/ml. Green: ATF6 Antibody. Blue: DAPI staining.

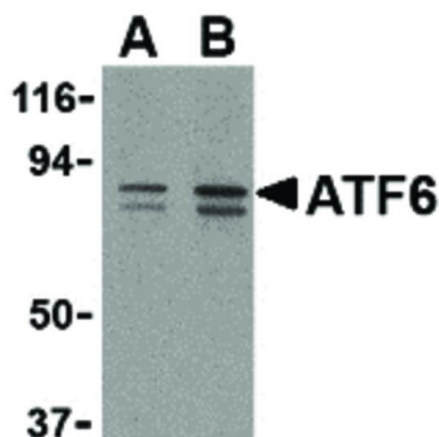
**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of ATF6 antibody. Cell Type: MCF7 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ATF6 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ATF6 is located in the endoplasmic reticulum, cell membrane, and nucleus. Staining: ATF6 as red fluorescent signal.



Immunohistochemistry

Immunocytochemistry of ATF6 antibody. Cell Type: MCF7 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ATF6 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ATF6 is located in the endoplasmic reticulum, cell membrane, and nucleus. Staining: ATF6 is stained brown with hematoxylin purple counterstain.



Western Blot

Western Blot of ATF6 antibody in MCF7 cell lysate. Lane A: ATF6 antibody at 0.5 µg/mL. Lane B: ATF6 antibody at 1 µg/mL. Load: 35 µg per lane. Primary antibody: ATF6 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 75 kDa, 80 kDa for ATF6. Other band(s): ATF6 splice variants and isoforms.

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.