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Datasheet for 600-401-493

ATF3 Antibody

Overview

Description:	Anti-ATF3 (RABBIT) Antibody - 600-401-493
Item No.:	600-401-493
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	ATF3, or Activating Transcription Factor 3, is a member of mammalian activation TF/CREB protein family of transcription factors. ATF3 binds the cAMP response element (cre) (consensus: 5'-gtgacgt[ac][ag]-3'), a sequence present in many viral and cellular promoters. However, ATF3 represses rather than activates transcription from promoters with ATF sites stabilizing inhibitory co-factors at the promoter. Alternate splicing forms of ATF3, called ATF3 delta Zip, lack the leucine zipper domain and do not bind DNA. ATF3 delta Zip stimulates transcription, presumably by sequestering inhibitory co-factors away from the promoter. Human ATF3 (SwissProt 18847) is a 20575 Da protein composed of 181 amino acids.
Synonyms:	rabbit anti-ATF3 Antibody, ATF 3, Cyclic AMP-dependent transcription factor ATF-3, cAMP-dependent transcription factor ATF-3, Activating transcription factor 3
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATF3
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human ATF3.

Purity/Specificity:	This affinity-purified antibody is directed against human ATF3 and is useful in determining its presence in various assays including ELISA and western blotting. This polyclonal antibody recognizes over-expressed ATF3 protein found in various expression systems. Reactivity is observed against human ATF3. Cross reactivity with ATF3 from other mammalian sources has not been tested.
Relevant Links:	• NCBI - NP_001025458.1 • UniProtKB - P18847 • GeneID - 467

Application Details

Tested Applications:	ELISA, WB
Application Note:	Affinity purified anti-ATF3 has been tested by ELISA and western blotting against recombinant forms of the protein. Although not tested, this antibody is likely function in most immunoassays including immunofluorescence microscopy, immunohistochemistry.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
WB:	1:200 - 1:2000

Formulation

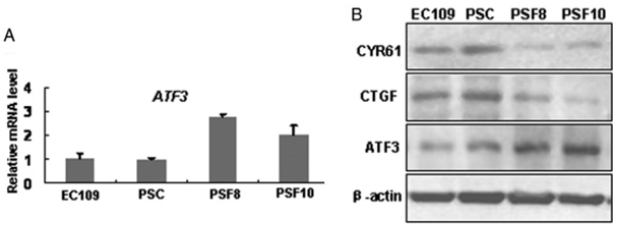
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

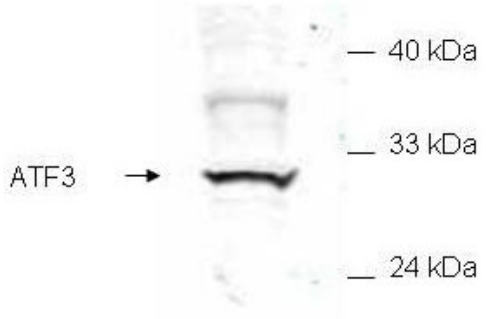
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several 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.

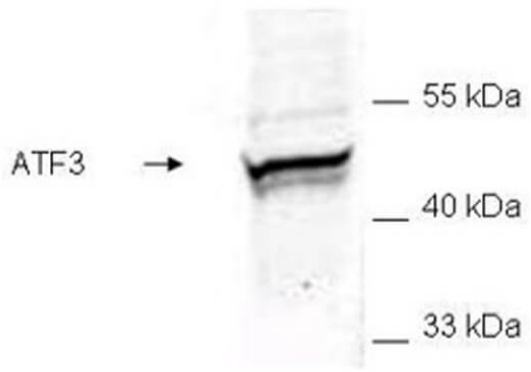
Images



Western Blot
Real-time RT-PCR and Western blotting analysis validate the microarray data. A: Real-time RT-PCR analysis was performed to analyze the expression levels of ATF3. The expression levels were normalized by the level of GAPDH and represented as fold change over PSC cells. B: Western blot analysis was performed to determine the protein levels of CTGF, CYR61, and ATF3. Fig 4.
PMID: 20056838



Western Blot
Western blot of mammalian whole cell extract transfected with HA epitope tagged human ATF3. Rockland's Affinity purified anti-ATF3 detects a band ~31 kDa corresponding to recombinant human ATF3. Immunostaining using Rockland's anti-HA epitope tag antibody confirms the composition of the recombinant band (not shown). The protein was transferred to nitrocellulose in 30 minutes using standard methods. After blocking with 5% goat serum and 0.5% non-fat milk in PBS, the membrane was probed with the primary antibody diluted 1:200 in 0.2X blocking buffer in PBS overnight at 4°C. Reaction was followed by washes and reaction with a 1:5000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] (code 611-132-122) for 30 min at room temperature. LICOR's Odyssey® Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.



Western Blot

Western blot of E.coli whole cell extract transfected with GST epitope tagged human ATF3. Rockland's Affinity purified anti-ATF3 detects a band ~48 kDa corresponding to recombinant human ATF3. Immunostaining using Rockland's anti-GST epitope tag antibody confirms the composition of the recombinant band (not shown). The protein was transferred to nitrocellulose using standard methods. After blocking with 5% goat serum and 0.5% non fat milk in PBS, the membrane was probed with the primary antibody diluted 1:200 in 0.2X blocking buffer in PBS overnight at 4°C. Reaction was followed by washes and reaction with a 1:5000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] (code 611-132-122) for 30 min at room temperature. LICOR's Odyssey® Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.

References

- Xie JJ et al. Involvement of CYR61 and CTGF in the fascin-mediated proliferation and invasiveness of esophageal squamous cell carcinomas cells. *Am J Pathol.* (2010)

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