Datasheet for ABIN129602

anti-ATF3 antibody (AA 113-130)

2 Images | 1 Publication

Go to Product page

Overview

Quantity:	100 µg
Target:	ATF3
Binding Specificity:	AA 113-130
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATF3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Fluorescence Microscopy (FM)

Product Details

Immunogen:	This antibody was produced from a synthetic peptide corresponding to aa 113-130 of human ATF3.
Isotype:	IgG
Characteristics:	Concentration Definition: by UV absorbance at 280 nm

Target Details

Target:	ATF3
Alternative Name:	ATF3 (ATF3 Products)
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.

Target Details

	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: Cyclic AMP-dependent transcription factor ATF-3 cAMP-dependent transcription factor ATF-3 Activating transcription factor 3
Gene ID:	467
UniProt:	P18847
Pathways:	Myometrial Relaxation and Contraction, ER-Nucleus Signaling, Unfolded Protein Response

Application Details

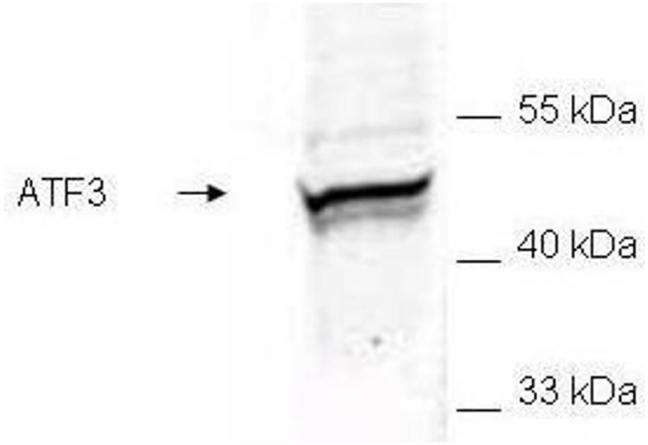
Application Notes:	Affinity purified anti-ATF3 has been tested by ELISA and western blotting against recombinant forms of the protein. Although not tested, this antibody is likely function in most immunoassays including immunofluorescence microscopy, immunohistochemistry.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
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:	-20 °C

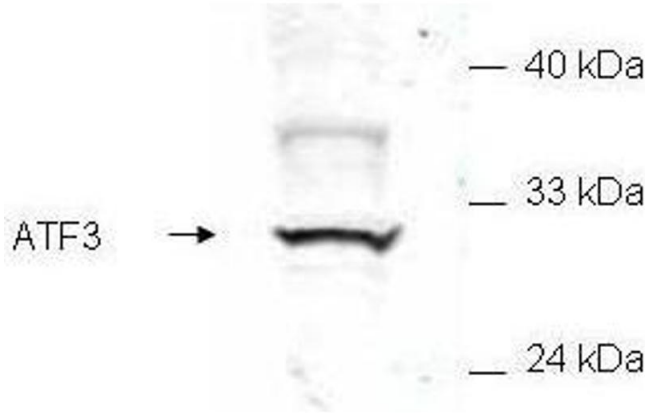
Publications

Product cited in:	Jordan, Buhrman, Sprague, Moore, Gao, Kappler, Slansky: "TCR hypervariable regions expressed by T cells that respond to effective tumor vaccines." in: **Cancer immunology, immunotherapy : CII**, (2012) (PubMed).



Western Blotting

Image 1. Western blot of E.coli whole cell extract transfected with GST epitope tagged human ATF3. Affinity purified anti-ATF3 detects a band ~48 kDa corresponding to recombinant human ATF3. Immunostaining using 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 Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.



Western Blotting

Image 2. Western blot of mammalian whole cell extract transfected with HA epitope tagged human ATF3. Affinity purified anti-ATF3 detects a band ~31 kDa corresponding to recombinant human ATF3. Immunostaining using 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 of800 conjugated Gt-a-Rabbit IgG [H&L] (code 611-132-122) for 30 min at room temperature. LICOR's Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.