

For Research Use Only

# ATF4 Monoclonal antibody, PBS Only

Catalog Number: 60035-1-PBS

Featured Product



## Basic Information

Catalog Number:

60035-1-PBS

Size:

100ug , Concentration: 1 mg/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG1279

GenBank Accession Number:

BC022088

GeneID (NCBI):

468

UNIPROT ID:

P18848

Full Name:

activating transcription factor 4 (tax-responsive enhancer element B67)

Calculated MW:

39 kDa

Observed MW:

45-50 kDa

Purification Method:

Protein G purification

CloneNo.:

3E4C5

## Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:

human, mouse, rat

## Background Information

ATF4 is a transcription factor, that accumulates predominantly in osteoblasts, where it regulates terminal osteoblast differentiation and bone formation. As a basic leucine-zipper (bZip) transcription factor, ATF4 can regulate amino acid metabolism, cellular redox state, and anti-stress responses. It also regulates age-related and diet-induced obesity and glucose homeostasis in mammals, and has conserved metabolic functions in flies. Due to its location at chromosome 22q13, a region linked to schizophrenia, ATF4 is considered as a positional candidate gene for schizophrenia. Otherwise, since ATF4 is induced by tumour microenvironmental factors, and regulates processes relevant to cancer progression, it might serve as a potential therapeutic target in cancer. This antibody is a mouse monoclonal antibody raised against full length human ATF4 antigen. The antibody recognizes the 45-50 kDa ATF4 protein and its phosphorylated forms (50 kDa).

## Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS only, pH7.3

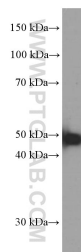
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

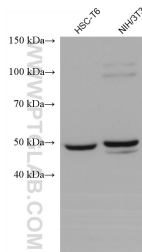
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

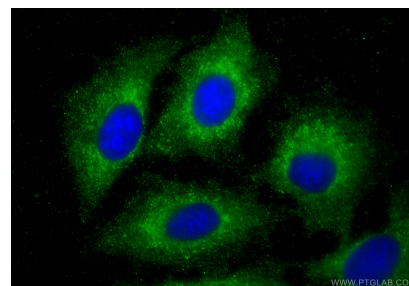
## Selected Validation Data



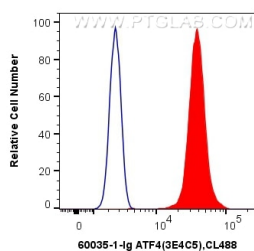
HepG2 cells were subjected to SDS PAGE followed by western blot with 60035-1-Ig (ATF4 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60035-1-PBS in a different storage buffer formulation.



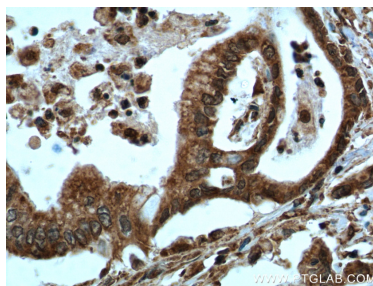
Various lysates were subjected to SDS PAGE followed by western blot with 60035-1-Ig (ATF4 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60035-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed A549 cells using ATF4 antibody (60035-1-Ig, Clone: 3E4C5) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 60035-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human ATF4 (60035-1-Ig, Clone:3E4C5) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 60035-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 60035-1-Ig (ATF4 Antibody) at dilution of 1:200 (under 40x lens). This data was developed using the same antibody clone with 60035-1-PBS in a different storage buffer formulation.