

For Research Use Only

ATF4 Monoclonal antibody

Catalog Number: 60035-1-Ig

Featured Product

55 Publications



Basic Information

Catalog Number:

60035-1-Ig

Size:

150ul, Concentration: 1000 ug/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

Recommended Dilutions:

WB 1:1000-1:4000

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF, ChIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HepG2 cells, human placenta tissue, HEK-293 cells, HSC-T6 cells, NIH/3T3 cells

IHC : human pancreas cancer tissue, human breast cancer tissue, human small intestine tissue, human pancreas tissue

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).

Notable Publications

Author	Pubmed ID	Journal	Application
Il-Je Cho	34679678	Antioxidants (Basel)	WB
Jingjing Wu	33115703	Biol Open	IF
Peng Liu	36209075	Cell Mol Biol Lett	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

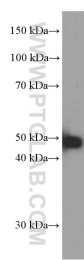
For technical support and original validation data for this product please contact:

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

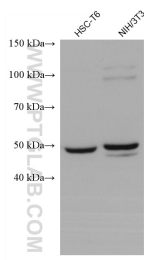
E: proteintech@ptglab.com
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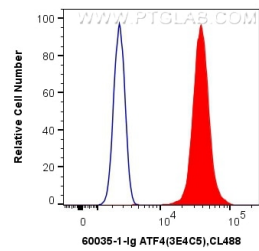
Selected Validation Data



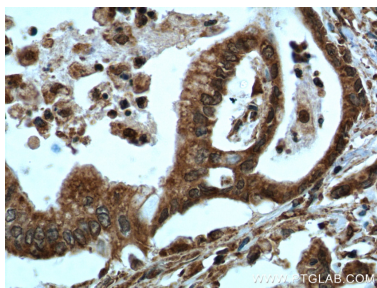
HepG2 cells were subjected to SDS PAGE followed by western blot with 60035-1-Ig (ATF4 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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.



1X10⁶ 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).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 60035-1-Ig (ATF4 Antibody) at dilution of 1:200 (under 40x lens).