For Research Use Only

ATF4 Monoclonal antibody, PBS Only

Catalog Number:60035-1-PBS **Featured Product**



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method:

60035-1-PBS

BC022088 GeneID (NCBI): Protein G purification

CloneNo.:

3E4C5

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

UNIPROT ID:

P18848 Full Name:

Mouse Isotype:

activating transcription factor 4 (tax-

responsive enhancer element B67)

lgG1 Immunogen Catalog Number:

Calculated MW:

AG1279

39 kDa

Observed MW: 45-50 kDa

Applications

Tested Applications:

WB, IHC, 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 osteoblastdifferentiation 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

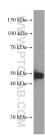
Storage:

Store at -80°C.

Storage Buffer: PBS only

in USA), or 1(312) 455-8498 (outside USA)

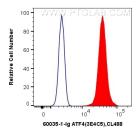
Selected Validation Data



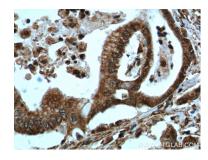
HepG2 cells were subjected to SDS PAGE followed by western blot with 60035-1-lg (ATF4 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60035-1-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 60035-1-lg (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.



1X10^6 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 paraffinembedded human pancreas cancer tissue slide using 60035-1-1g (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.