

For Research Use Only

ATF6 Monoclonal antibody, PBS Only



Catalog Number: 66563-1-PBS

Featured Product

Basic Information

Catalog Number:

66563-1-PBS

Size:

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

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG21456

GenBank Accession Number:

BC014969

GeneID (NCBI):

22926

UNIPROT ID:

P18850

Full Name:

activating transcription factor 6

Calculated MW:

75 kDa

Observed MW:

90-100 kDa

Purification Method:

Protein A purification

CloneNo.:

3B7E4

Applications

Tested Applications:

ELISA, IF/ICC, IHC, WB

Species Specificity:

rat, mouse, human

Background Information

Activating transcription factor 6 (ATF6) is a transcription factor that acts during endoplasmic reticulum stress by activating unfolded protein response target genes. Binds DNA on the 5'-CCAC[GA]-3' half of the ER stress response element (ERSE) (5'-CCAAT-N(9)-CCAC[GA]-3') and of ERSE II (5'-ATTGG-N-CCACG-3'). Binding to ERSE requires binding of NF-Y to ERSE. Could also be involved in activation of transcription by the serum response factor. During unfolded protein response an approximative 50 kDa fragment containing the cytoplasmic transcription factor domain is released by proteolysis. The cleavage seems to be performed sequentially by site-1 and site-2 proteases. The fully glycosylated form of ATF6, a 670 amino acid protein, exhibits an electrophoretic mobility of ~90 kDa in denaturing SDS-gels, in part because of the glycosylated modifications. ATF6 has 3 consensus sites for N-linked glycosylation and exists constitutively as a glycosylated protein. Differentially glycosylated ATF6 forms may result from mutations or experimental treatment (PMID:15804611) (PMID:14699159). The antibody recognizes cleaved and fully glycosylated forms of ATF6.

Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

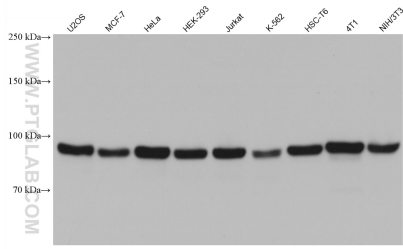
For technical support and original validation data for this product please contact:

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

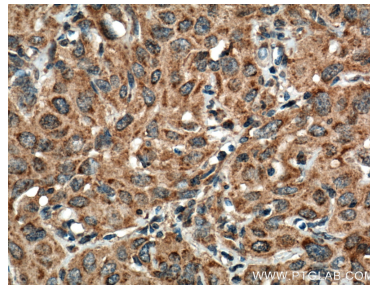
E: proteintech@ptglab.com
W: ptglab.com

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

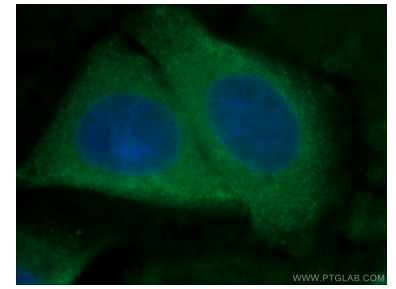
Selected Validation Data



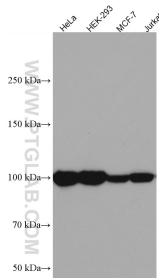
Various lysates were subjected to SDS PAGE followed by western blot with 66563-1-Ig (ATF6 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66563-1-PBS in a different storage buffer formulation.



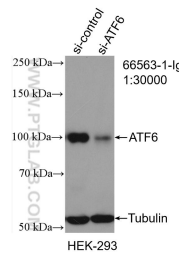
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 66563-1-Ig (ATF6 antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66563-1-PBS in a different storage buffer formulation.



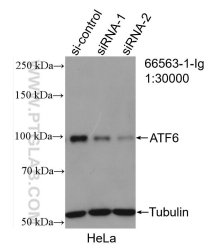
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 66563-1-Ig (ATF6 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66563-1-PBS in a different storage buffer formulation.



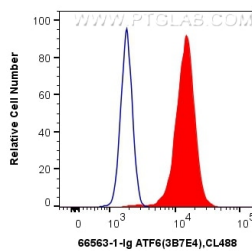
Various lysates were subjected to SDS PAGE followed by western blot with 66563-1-Ig (ATF6 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66563-1-PBS in a different storage buffer formulation.



WB result of ATF6 antibody (66563-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATF6 transfected HEK-293 cells. This data was developed using the same antibody clone with 66563-1-PBS in a different storage buffer formulation.



WB result of ATF6 antibody (66563-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATF6 transfected HeLa cells. This data was developed using the same antibody clone with 66563-1-PBS in a different storage buffer formulation.



1×10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human ATF6 (66563-1-Ig, Clone:3B7E4) 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 66563-1-PBS in a different storage buffer formulation.