

For Research Use Only

# ATF6 Monoclonal antibody

Catalog Number: 66563-1-Ig

Featured Product

34 Publications



## Basic Information

<b>Catalog Number:</b> 66563-1-Ig	<b>GenBank Accession Number:</b> BC014969	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul, Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 22926	<b>CloneNo.:</b> 3B7E4
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P18850	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:250-1:1000 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> activating transcription factor 6	
<b>Immunogen Catalog Number:</b> AG21456	<b>Calculated MW:</b> 75 kDa	
	<b>Observed MW:</b> 90-100 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b> <b>WB:</b> U2OS cells, HeLa cells, HEK-293 cells, 4T1 cells, HSC-T6 cells, NIH/3T3 cells, RAW 264.7 cells, MCF-7 cells, Jurkat cells, K-562 cells <b>IHC:</b> human cervical cancer tissue, human breast cancer tissue <b>IF/ICC:</b> HeLa cells,
<b>Cited Applications:</b> WB, IHC, IF	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, mouse, rat, pig	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Piaopiao Wen	36139350	Cells	WB
Qi Xu	36341965	Environ Toxicol Pharmacol	WB
Simin Zhou	34744770	Front Physiol	WB, IF

## Storage

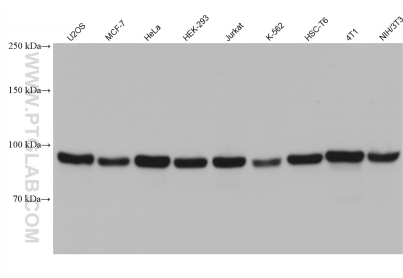
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

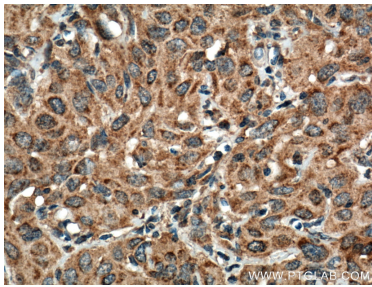
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

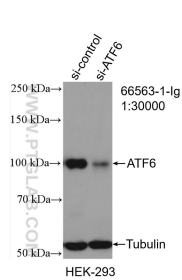
Selected Validation Data



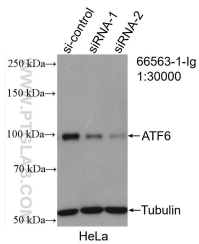
Various lysates were subjected to SDS PAGE followed by western blot with 66563-1-Ig (ATF6 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



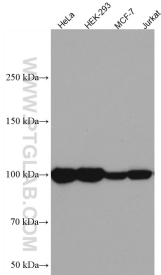
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 66563-1-Ig (ATF6 antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



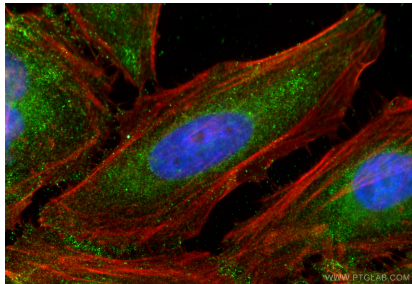
WB result of ATF6 antibody (66563-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATF6 transfected HEK-293 cells.



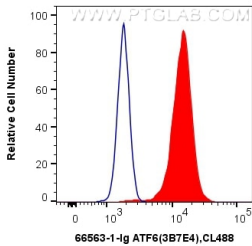
WB result of ATF6 antibody (66563-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATF6 transfected HeLa cells.



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.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using ATF6 antibody (66563-1-Ig, Clone: 3B7E4 ) at dilution of 1:800 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002), CL594-phalloidin (red).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human ATF6 (66563-1-Ig, Clone:3B7E4) and CoraLite®488-Conjugated 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).