For Research Use Only

ATF6 Polyclonal antibody

Catalog Number:24169-1-AP Featured Product 218 Publications

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Basic Information

Catalog Number:
24169-1-AP

Size:
600 μg/ml

Source:
Rabbit

Isotype:
IgG

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:
60 kDa, 90-100 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:14000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:20-1:200
IF 1:10-1:100

Applications

Tested Applications:
FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:
IF, IHC, IP, WB

Species Specificity:
human, rat, mouse

Cited Species:
human, chicken, rat, mouse, monkey, 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 : HeLa cells, HEK-293 cells, MCF-7 cells

IP : HeLa cells,

IHC : human cervical cancer tissue, human breast hyperplasia tissue, human pancreas cancer tissue, human pancreas tissue

IF : HeLa cells,

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

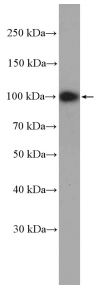
Author	Pubmed ID	Journal	Application
Junxia Hu	31580970	Biomed Pharmacother	WB
Jing Sun	34650437	Front Pharmacol	WB
Yingchao Gong	34582847	Eur J Pharmacol	WB

Storage

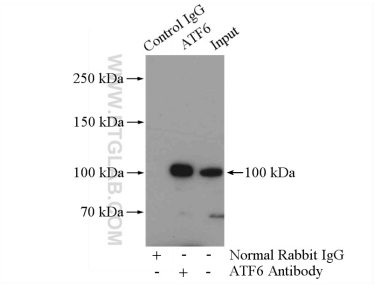
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

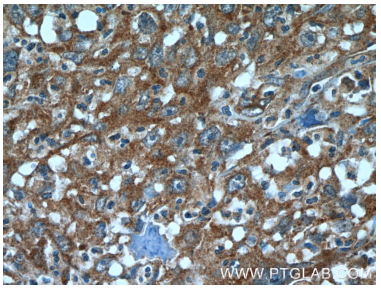
Selected Validation Data



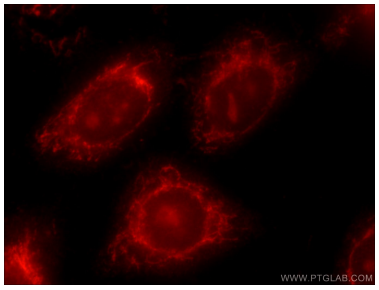
HeLa cells were subjected to SDS PAGE followed by western blot with 24169-1-AP (ATF6 Antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



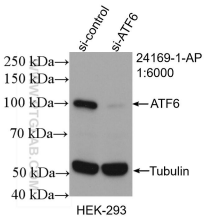
IP result of anti-ATF6 (IP:24169-1-AP, 4ug; Detection:24169-1-AP 1:1500) with HeLa cells lysate 2800ug.



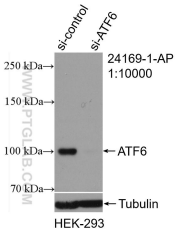
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 24169-1-AP (ATF6 Antibody) at dilution of 1:50 (under 40x lens).



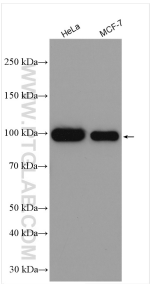
Immunofluorescent analysis of HeLa cells using 24169-1-AP (ATF6 antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



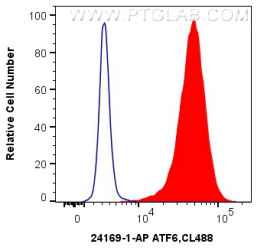
WB result of ATF6 antibody (24169-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATF6 transfected HEK-293 cells.



WB result of ATF6 antibody (24169-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATF6 transfected HEK-293 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 24169-1-AP (ATF6 antibody) at dilution of 1:7000 incubated at room temperature for 1.5 hours.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human ATF6 (24169-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Intracellular Staining Permeabilization Wash Buffer.