

Rabbit ATF6 Polyclonal Antibody | anti-ATF6 antibody

Phospho-ATF6 (Thr166) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31376	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Horse (100%), Rabbit (100%), Dog (100%)	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

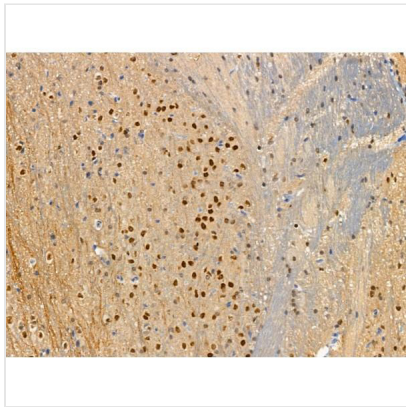
ATF6; Polyclonal Antibody; Phospho-ATF6 (Thr166) Antibody; Activating transcription factor 6 alpha; Activating transcription factor 6; ATF 6; ATF6 alpha; ATF6-alpha; ATF6A; ATF6A_HUMAN; cAMP dependent transcription factor ATF 6 alpha; cAMP-dependent transcription factor ATF-6 alpha; Cyclic AMP dependent transcription factor ATF 6 alpha; DKFZp686P2194; ESTM49; FLJ21663; Processed cyclic AMP dependent transcription factor ATF 6 alpha; Processed cyclic AMP-dependent transcription factor ATF-6 alpha; anti-ATF6 antibody

PRODUCT SPECIFICATIONS

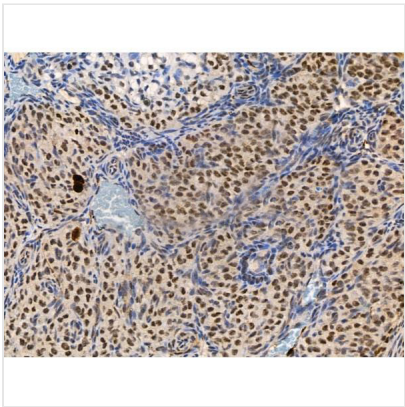
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Horse (100%), Rabbit (100%), Dog (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-ATF6 (Thr166) Antibody detects endogenous levels of ATF6 only when phosphorylated at Thr166. Tissue Specificity: Ubiquitous.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-ATF6 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA (Peptide ELISA)
Application Notes	WB: 1:500-1:2000 IHC: 1:50-1:200 Peptide ELISA: 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human ATF6 around the phosphorylation site of Thr166.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	During unfolded protein response, a fragment of approximately 50kDa containing the cytoplasmic transcription factor domain is released by proteolysis. The cleavage seems to be performed sequentially by site-1 and site-2 proteases. N-glycosylated. The glycosylation status may serve as a sensor for ER homeostasis, resulting in ATF6 activation to trigger the unfolded protein response (UPR). Phosphorylated in vitro by MAPK14/P38MAPK.
Subunit Structure	Homodimer and heterodimer with ATF6-beta. The dimer interacts with the nuclear transcription factor Y (NF-Y) trimer through direct binding to NF-Y subunit C (NF-YC). Interacts also with the transcription factors GTF2I, YY1 and SRF. Interacts (via luminal domain) with THBS1 (By similarity). Interacts with THBS4 (via EGF-like 3; calcium-binding domain) which facilitates its processing, activation and nuclear translocation. Interacts with XBP1 isoform 2; the interaction occurs in a ER stress-dependent manner.
Similarity	The basic domain functions as a nuclear localization signal. The basic leucine-zipper domain is sufficient for association with the NF-Y trimer and binding to ERSE. Belongs to the bZIP family. ATF subfamily.

Subcellular Location	Endoplasmic reticulum membrane>Single-pass type II membrane protein. Nucleus. Note: Under ER stress the cleaved N-terminal cytoplasmic domain translocates into the nucleus. THBS4 promotes its nuclear shuttling.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



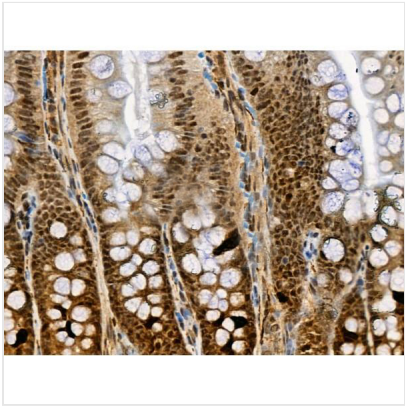
IHC (Immunohistochemistry)
At 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



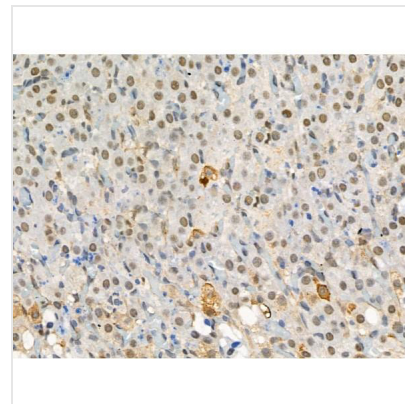
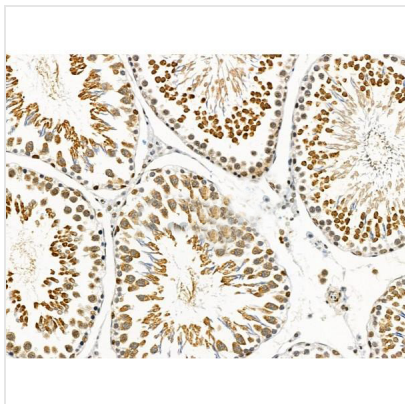
IHC (Immunohistochemistry)
At 1/100 staining Mouse ovarian tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
At 1/100 staining Rat brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
At 1/100 staining Rat colorectal tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Rat testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

IHC (Immunohistochemistry)

Staining Rat ovarian tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-ATF6 antibody

Transmembrane glycoprotein of the endoplasmic reticulum that functions as a transcription activator and initiates the unfolded protein response (UPR) during endoplasmic reticulum stress. Cleaved upon ER stress, the N-terminal processed cyclic AMP-dependent transcription factor ATF-6 alpha translocates to the nucleus where it activates transcription of genes involved in the UPR. 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. May play a role in foveal development and cone function in the retina.

NCBI AND UNIPROT INFORMATION

NCBI GI #	2245630
NCBI GeneID	22926
UniProt Accession #	P18850; O15139; Q5VW62; Q6IPB5; Q9UEC9
Molecular Weight	74,585 Da
NCBI Official Full Name	ATF6
NCBI Official Synonym Full Names	activating transcription factor 6
NCBI Official Symbol	ATF6
NCBI Official Synonym Symbols	ATF6A
NCBI Protein Information	cyclic AMP-dependent transcription factor ATF-6 alpha; cAMP-dependent transcription factor ATF-6 alpha
UniProt Protein Name	Cyclic AMP-dependent transcription factor ATF-6 alpha
UniProt Gene Name	ATF6
UniProt Synonym Gene Names	cAMP-dependent transcription factor ATF-6 alpha; ATF6-alpha
UniProt Entry Name	ATF6A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/atf6-antibody-western-blot-immunohistochemistry-peptide-elisa-elisa/31376>