

Product datasheet for **AP08853PU-N**

ATF6 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Immunocytochemistry. Immunohistochemistry on Paraffin Sections: 5 µg/ml. Western Blot: 0.5 - 1 µg/ml.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide from Human ATF6. Epitope: C-Terminus.
Specificity:	This antibody reacts to Activating Transcription Factor 6 (ATF6).
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.02% Sodium Azide
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	activating transcription factor 6
Database Link:	Entrez Gene 22926 Human P18850



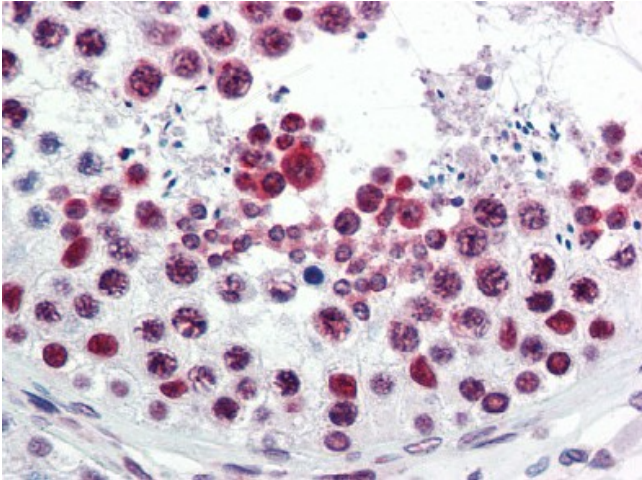
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Background:

ATF6 is a transcription factor that acts during endoplasmic reticulum stress by activating unfolded protein response target genes. It 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. ATF6 could also be involved in activation of transcription by the serum response factor. ATF6 exists as a 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). It also interacts with the transcription factors GTF2I, YY1 and SRF. Under ER stress the cleaved N-terminal cytoplasmic domain translocates into the nucleus. The basic domain of ATF6 functions as a nuclear localization signal and the basic leucine zipper domain is sufficient for association with the NF-Y trimer and binding to ERSE. During the unfolded protein response an approximately 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. ATF6 is N glycosylated, phosphorylated in vitro by MAPK14/P38MAPK and belongs to the bZIP family.

Synonyms:

ATF-6, Activating transcription factor 6 alpha

Product images:

Testis: Formalin-Fixed Paraffin-Embedded (FFPE)