

ATF6A (PT0177R) PT® Rabbit mAb

Catalog No: YM8109

Reactivity: Human; Mouse; Rat;

Applications: WB;IF;IP;ELISA

Target: ATF6A

Fields: >>Protein processing in endoplasmic reticulum;>>Alzheimer

disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Pathways of

neurodegeneration - multiple diseases;>>Lipid and atherosclerosis

Gene Name: ATF6

Protein Name: ATF6A

Human Gene Id: 22926

Human Swiss Prot

No:

Specificity: endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Source : Monoclonal, rabbit, IgG, Kappa

P18850

Dilution: WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP 1:50-200

Purification: Protein A

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 75kD

Observed Band: 100kD

Background: This gene encodes a transcription factor that activates target genes for the

unfolded protein response (UPR) during endoplasmic reticulum (ER) stress.

Although it is a transcription factor, this protein is unusual in that it is synthesized as a transmembrane protein that is embedded in the ER. It functions as an ER stress sensor/transducer, and following ER stress-induced proteolysis, it functions as a nuclear transcription factor via a cis-acting ER stress response element (ERSE) that is present in the promoters of genes encoding ER chaperones. This protein has been identified as a survival factor for quiescent but not proliferative squamous carcinoma cells. There have been conflicting reports about the association of polymorphisms in this gene with diabetes in different populations, but another polymorphism has been associated with increased plasma cholesterol levels. This gene is also thought to be a potential therapeutic target for cystic fibrosis. [provided by RefSeq, Aug 2011],

Function:

domain:The basic domain functions as a nuclear localization signal.,domain:The basic leucine-zipper domain is sufficient for association with the NF-Y trimer and binding to ERSE.,function: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.,PTM: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.,PTM:N-glycosylated.,PTM:Phosphorylated in vitro by MAPK14/P38MAPK.,similarity:Bel

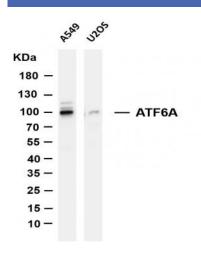
Subcellular Location:

Cytoplasm

Expression:

Ubiquitous.

Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-ATF6A (PT0177R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: U2OS Predicted band size: 75Da Observed band size: 100kDa