

Product datasheet

Recombinant Human ATF6 protein ab131846

1 Image

Description

Product name	Recombinant Human ATF6 protein
Expression system	Wheat germ
Accession	P18850
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	<p>MGEPAGVAGTMESPFSPGLFHRLDEDWDSALFAELGYF TDTDELQLEAAN ETYENNFNLDLDFDLVLPWESDIWDINNQICTVKDIKAEPQ PLSPASSSY SVSSPRSVDSYSSTQHVPEELDLSSSSQMSPLSLYGENS NSLSSAEPLKE DKPVTGPRNKTENGLTPKKKIQVNSKPSIQPKPLLLPAAP KTQTISSIPP QT</p>
Predicted molecular weight	49 kDa including tags
Amino acids	1 to 202
Tags	GST tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab131846** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	<p>ELISA</p> <p>SDS-PAGE</p> <p>Western blot</p>
Form	Liquid
Additional notes	Protein concentration is above or equal to 0.05 mg/mL.

Preparation and Storage

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Stability and Storage

Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCl

Glutathione is reduced

General Info

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.

Tissue specificity

Ubiquitous.

Sequence similarities

Belongs to the bZIP family. ATF subfamily.
Contains 1 bZIP domain.

Domain

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.

Post-translational modifications

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.

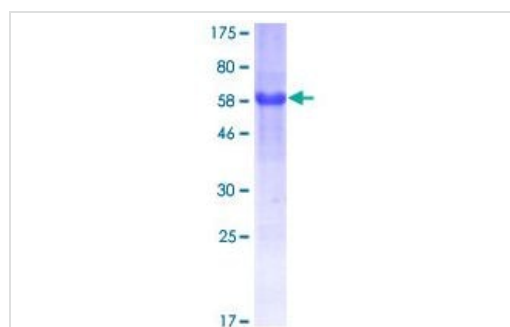
N-glycosylated. The glycosylation status may serve as a sensor for ER homeostasis, resulting in ATF6 activation to trigger the unfolded protein response (UPR).

Phosphorylated in vitro by MAPK14/P38MAPK.

Cellular localization

Endoplasmic reticulum membrane and Nucleus. Under ER stress the cleaved N-terminal cytoplasmic domain translocates into the nucleus.

Images



SDS-PAGE - Recombinant Human ATF6 protein
(ab131846)

12.5% SDS-PAGE stained with Coomassie Blue showing
ab131846 at approximately 48.5 kDa.

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