# abcam

# Product datasheet

# Anti-ATF6 antibody ab134561

## ★★★★★ 1 Abreviews 3 Images

#### Overview

Product name Anti-ATF6 antibody

**Description** Rabbit polyclonal to ATF6

Host species Rabbit

Tested applications Suitable for: WB, IP, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Rabbit, Chimpanzee, Gorilla, Elephant

**Immunogen** Synthetic peptide corresponding to Human ATF6 aa 600-700.

Database link: P18850

Positive control WB: HeLa, 293T and Jurkat whole cell lysate. IP: HeLa cells. IHC-P: Human ovarian carcinoma.

**General notes** 

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C.

**Storage buffer** pH: 7

Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate

pH 7 to 8.

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

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#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab134561 in the following tested applications.

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

Application	Abreviews	Notes	
WB	*** <u>*</u>	1/2000 - 1/10000. Predicted molecular weight: 74 kDa.	
IP		Use at 2-10 µg/mg of lysate.	
IHC-P		1/500 - 1/2000.	

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**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).

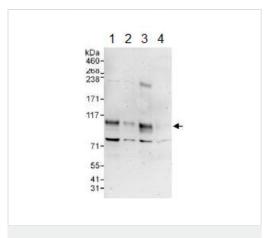
Phosphorylated in vitro by MAPK14/P38MAPK.

**Cellular localization** 

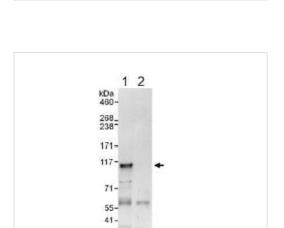
Endoplasmic reticulum membrane and Nucleus. Under ER stress the cleaved N-terminal

cytoplasmic domain translocates into the nucleus.

# **Images**



Western blot - Anti-ATF6 antibody (ab134561)



Immunoprecipitation - Anti-ATF6 antibody (ab134561)

All lanes: Anti-ATF6 antibody (ab134561) at 0.1 µg/ml

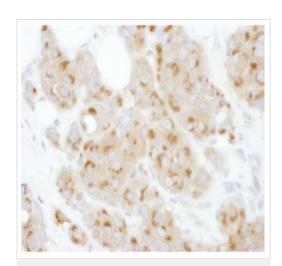
Lane 1 : HeLa whole cell lysate at 50 μg Lane 2 : HeLa whole cell lysate at 15 μg Lane 3 : 293T whole cell lysate at 50 μg Lane 4 : Jurkat whole cell lysate at 50 μg

Developed using the ECL technique.

Predicted band size: 74 kDa

Exposure time: 3 minutes

Detection of ATF6 by Western Blot of Immunprecipitate. Immunoprecipitation of ATF6 in HeLa whole cell lysate, using ab134561 at 6  $\mu$ g/mg lysate (1 mg/IP; 20% of IP loaded/lane). For the subsequent Western blot, ab134561 was used at 1  $\mu$ g/ml. The lysate in lane 2 is precipitated with an lgG control antibody. Detection: Chemiluminescence with an exposure time of 30 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATF6 antibody (ab134561)

Paraffin embedded human ovarian carcinoma tissue stained for ATF6 using ab134561 1/1000 dilution in immunohistochemical analysis. Counterstain: hematoxylin (blue).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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