

Product datasheet

Anti-ATF6 antibody ab174756

★★★★★ [1 Abreviews](#) [1 References](#) [3 Images](#)

Overview

Product name	Anti-ATF6 antibody
Description	Goat polyclonal to ATF6
Host species	Goat
Tested applications	Suitable for: WB, ICC
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human ATF6 aa 437-449 (internal sequence) (Cysteine residue). Sequence: NSYRYDHSVSNDK Database link: P18850 Run BLAST with Run BLAST with
Positive control	WB: HeLa and MCF7 whole cell lysate; HeLa and Jurkat nuclear cell lysate; ICC: A431 and HeLa cells.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 99% Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab174756 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	★★★★★ (1)	Use a concentration of 0.3 - 2 µg/ml. Detects a band of approximately 75-80 kDa (predicted molecular weight: 74 kDa). A 1 hour primary incubation is recommended for this product.
ICC		Use a concentration of 10 µg/ml.

Target

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.

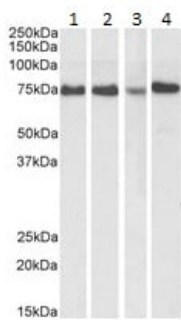
Post-translational modifications During unfolded protein response an approximative 50 kDa fragment containing the cytoplasmic transcription factor domain is released by proteolysis. The cleavage seems to be performed sequentially by site-1 and site-2 proteases.

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 (ab174756)

All lanes : Anti-ATF6 antibody (ab174756) at 1 µg/ml (primary incubation: 1 hour at room temperature)

Lane 1 : HeLa whole cell lysate in RIPA buffer

Lane 2 : MCF7 whole cell lysate in RIPA buffer

Lane 3 : HeLa nuclear cell lysate in RIPA buffer

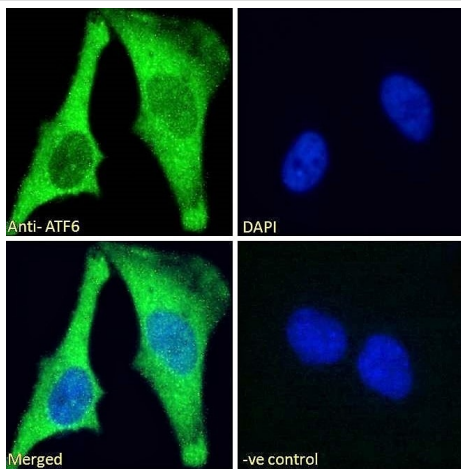
Lane 4 : Jurkat nuclear cell lysate in RIPA buffer

Lysates/proteins at 35 µg per lane.

Developed using the ECL technique.

Predicted band size: 74 kDa

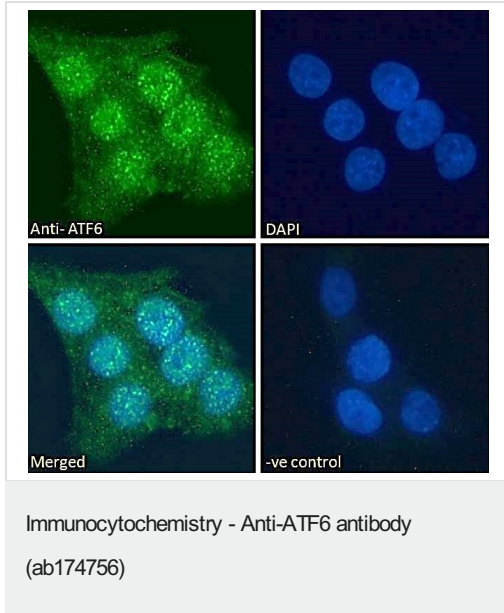
Observed band size: 75-80 kDa



Immunocytochemistry - Anti-ATF6 antibody (ab174756)

Immunocytochemistry analysis of paraformaldehyde fixed HeLa cells labelling ATF6 with ab174756 at 10 µg/mL. Cells permeabilized with 0.15% Triton. Primary incubation for 1 hour followed by Alexa Fluor[®] 488 secondary antibody (2 µg/mL). The nuclear stain is DAPI (blue).

Negative control: Unimmunized goat IgG (10 µg/mL) followed by Alexa Fluor[®] 488 secondary antibody (2 µg/mL).



Immunocytochemistry analysis of paraformaldehyde fixed A431 cells labelling ATF6 with ab174756 at 10 µg/mL. Cells permeabilized with 0.15% Triton. Primary incubation for 1 hour followed by Alexa Fluor® 488 secondary antibody (2 µg/mL). The nuclear stain is DAPI (blue).

Negative control: Unimmunized goat IgG (10 µg/mL) followed by Alexa Fluor® 488 secondary antibody (2 µg/mL).

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

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