abcam

Product datasheet

Anti-ATF6 antibody ab203119

★★★★★ 6 Abreviews 56 References 4 Images

Overview

Product name Anti-ATF6 antibody

Description Rabbit polyclonal to ATF6

Host species Rabbit

Tested applications Suitable for: IHC-P, WB, Flow Cyt (Intra), ICC/IF

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human ATF6 aa 300-400 conjugated to keyhole limpet haemocyanin.

The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your

needs, please **contact** our Scientific Support team to discuss your requirements.

Database link: P18850

Run BLAST with
Run BLAST with

Positive control WB: huvec, raji, jurkat, a549, thp-1, 293t and du145 cells ICC/IF: U-251 cells IHC: HeLa cells

Flow-Cyt: Jurkat cells

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Proclin 300

Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, 48.98% TBS, 1X

Purity Protein A purified

Clonality Polyclonal

1

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab203119 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		
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Use at 1/50 - 1/200 with fluorescent detection methods.		
WB	★★★★☆ (1)	1/100 - 1/1000. Predicted molecular weight: 75 kDa.		
Flow Cyt (Intra)		1/100.		
ICC/IF	★★★★☆ (3)	1/200.		

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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 similaritiesBelongs 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

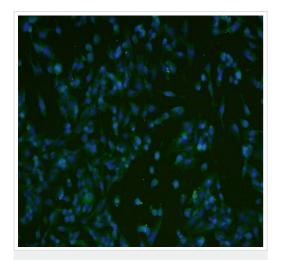
ATF6 activation to trigger the unfolded protein response (UPR).

Phosphorylated in vitro by MAPK14/P38MAPK.

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

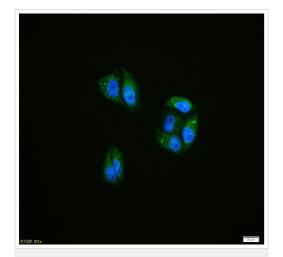
cytoplasmic domain translocates into the nucleus.

Images



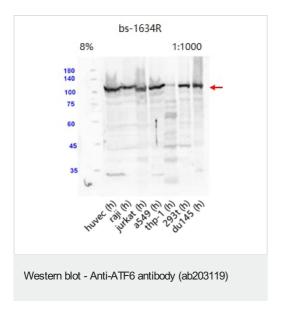
Immunocytochemistry/ Immunofluorescence - Anti-ATF6 antibody (ab203119)

Immunocytochemistry/ Immunofluorescence analysis of U-251 cells labeling ATF6 with ab203119 at 1/200 (diluted in PBS and incubated for 2 hours at 37°C). Goat Anti-Rabbit lgG (H+L) FITC conjugated antibody was used as the secondary antibody. Nuclei were stained with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATF6 antibody (ab203119)

Immunohistochemical analysis of HeLa cells stained for ATF6 using ab203119 at a dilution of 1:100.



All lanes: Anti-ATF6 antibody (ab203119) at 1/1000 dilution

Lane 1: HUVEC cell lysate

Lane 2: Raji cell lysate

Lane 3: Jurkat cell lysate

Lane 4: A549 cell lysate

Lane 5: thp-1 cell lysate

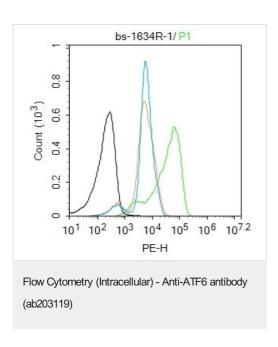
Lane 6: 293T cell lysate

Lane 7: du145 cell lysate

Secondary

All lanes : Conjugated secondary at 1/2000 dilution

Predicted band size: 75 kDa



Jurkat cells were fixed with 4% PFA for 10min at room temperature, permeabilized with 90% ice-cold methanol for 20 min at -20**I**, and incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with ATF6 Antibody (ab203119) at 1:100 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2%BSA in PBS, followed by secondary antibody incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed. Cells stained with primary antibody (green), and isotype control (orange).

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

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