Product Datasheet

Anti-ATF6 Antibody ab203119

Overview

Product name: Anti-ATF6 antibody
Description: Rabbit polyclonal to ATF6
Host species: Rabbit
Tested applications: Suitable for: IHC-P, WB, ICC/IF
Species reactivity: Reacts with: Mouse, Rat, 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

Positive control: WB: Mouse pancreas lysates IHC: Rat brain tissue. ICC/IF: U-251 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 buffer: pH: 7.2
Preservative: 0.09% Sodium azide
Constituents: 50% Glycerol (glycerin, glycerine), 0.01% BSA
Purity: Protein A purified
Clonality: Polyclonal
Isotype: IgG
**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.

**Applications**
The 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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-P</td>
<td></td>
<td>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.</td>
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<tr>
<td>WB</td>
<td>★★★★★☆ (1)</td>
<td>1/100 - 1/1000. Predicted molecular weight: 75 kDa.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>★★★★★☆ (3)</td>
<td>1/200.</td>
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**Target**

**Images**
Western blot - Anti-ATF6 antibody (ab203119)

Anti-ATF6 antibody (ab203119) at 1/300 dilution + mouse pancreas lysates

**Secondary**

Conjugated secondary antibody at 1/10000 dilution

**Predicted band size:** 75 kDa

Immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded rat brain tissue sections labeling ATF6 with ab203119 at a 1/200 dilution, followed by conjugation to the secondary antibody and DAB staining.
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 IgG (H+L) FITC conjugated antibody was used as the secondary antibody. Nuclei were stained with DAPI (blue).

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

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