

Product datasheet

Anti-ATF6 antibody ab37149

★★★★★ [6 Abreviews](#) [87 References](#) [4 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-ATF6 antibody |
| Description | Rabbit polyclonal to ATF6 |
| Host species | Rabbit |
| Specificity | Based on 100% sequence alignment, this antibody detects ATF6 isoform A (alpha). The antibody is predicted to recognize the 50kDa fragment as it recognizes a peptide sequence from near the amino terminus. We have not tested stressed cells to see if the 50kDa cleavage product can be detected. |
| Tested applications | Suitable for: WB, IHC-P Unsuitable for: ICC |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide corresponding to Human ATF6 (N terminal). 17 a.a. immunogen somewhere between a.a. 25-75 |
| Positive control | WB: Human breast cell lysate. Mouse heart and skeletal lysates. Rat kidney lysate. IHC-P: Mouse and rat brain tissue. |
| 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: 7.2 Preservative: 0.02% Sodium azide Constituent: 99% PBS |
| Purity | Immunogen affinity purified |

| | |
|---------------------------|-------------------------|
| Purification notes | Immunoaffinity purified |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab37149 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

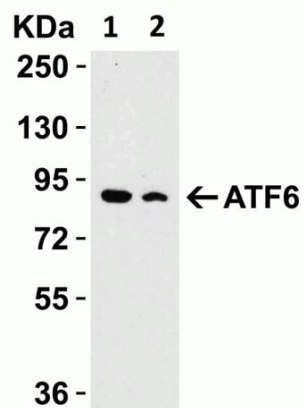
| Application | Abreviews | Notes |
|-------------|-----------|--|
| WB | ★★★★★ (2) | Use a concentration of 0.5 - 1 µg/ml. Detects a band of approximately 85 kDa (predicted molecular weight: 75 kDa). |
| IHC-P | | Use a concentration of 5 µg/ml. |

Application notes Is unsuitable for ICC.

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 (ab37149)

All lanes : Anti-ATF6 antibody (ab37149) at 1 µg/ml

Lane 1 : Mouse Heart Lysate

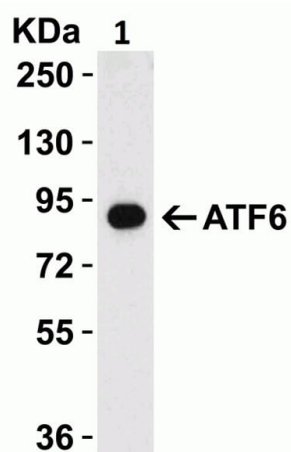
Lane 2 : Mouse Skeletal Muscle Lysate

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG HRP Conjugate at 1/10000 dilution

Predicted band size: 75 kDa



Western blot - Anti-ATF6 antibody (ab37149)

Blocking buffer: 5% NFDM/TBST.

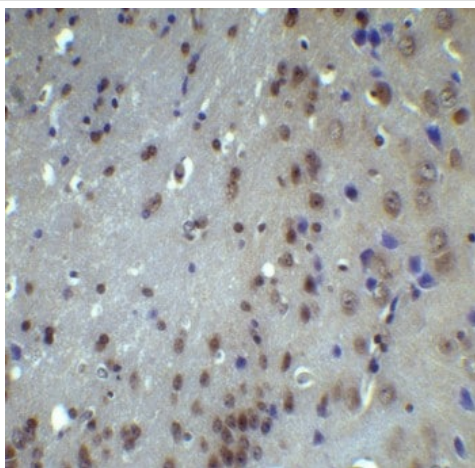
Anti-ATF6 antibody (ab37149) at 1 µg/ml + Rat Kidney Lysate at 15 µg

Secondary

Goat Anti-Rabbit IgG HRP Conjugate at 1/10000 dilution

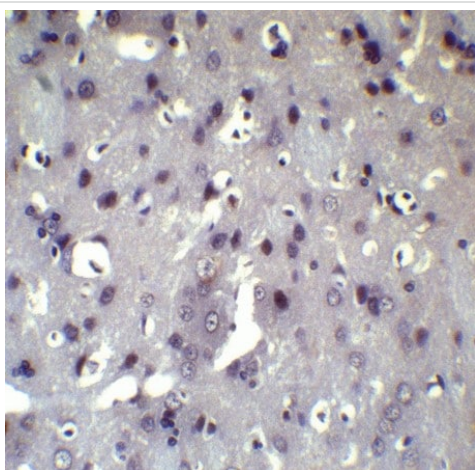
Predicted band size: 75 kDa

Blocking buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATF6 antibody (ab37149)

Immunohistochemical analysis of paraffin-embedded mouse brain tissue using ab37149 at 5µg/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1h at RT. Antigen retrieval was by heat mediation with a citrate buffer (pH 6.0). Samples were incubated with primary antibody overnight at 4°C. Goat anti-rabbit IgG H&L (HRP) at 1/250 dilution was used as a secondary. Counter stained with Hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATF6 antibody (ab37149)

Immunohistochemical analysis of paraffin-embedded rat brain tissue using ab37149 at 5µg/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1h at RT. Antigen retrieval was by heat mediation with a citrate buffer (pH 6.0). Samples were incubated with primary antibody overnight at 4°C. Goat anti-rabbit IgG H&L (HRP) at 1/250 dilution was used as a secondary. Counter stained with Hematoxylin.

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