abcam

Product datasheet

Anti-FOXO3A antibody ab17026

3 Abreviews 17 References 2 Images

Overview

Product name	Anti-FOXO3A antibody
Description	Goat polyclonal to FOXO3A
Host species	Goat
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide: GAKQASSQSWVPG , corresponding to amino acids 661-673 of Human FOXO3A. Run BLAST with Run BLAST with
Positive control	Recombinant Human FOXO3A protein (**ab114191**) can be used as a positive control in WB. Human heart tissue lysate.
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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 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 ab17026 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	★★★★☆ **(3)**	Use a concentration of 0.1 - 1 µg/ml. Detects a band of approximately 70 kDa (predicted molecular weight: 72 kDa). 1 hour primary incubation is recommended for this product.

Target

Function Transcriptional activator which triggers apoptosis in the absence of survival factors, including neuronal cell death upon oxidative stress. Recognizes and binds to the DNA sequence 5'-[AG]TAAA[TC]A-3'.

Tissue specificity Ubiquitous.

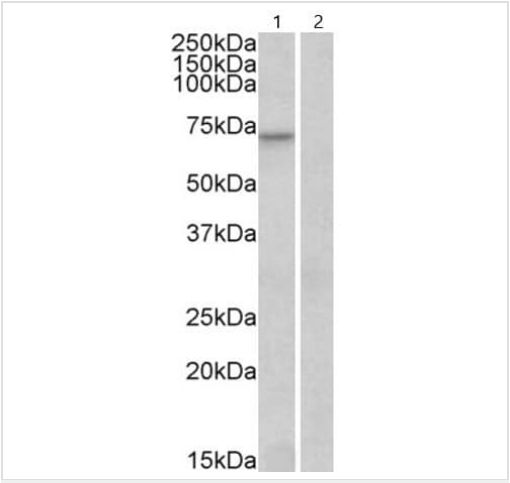
Involvement in disease Note=A chromosomal aberration involving FOXO3 is found in secondary acute leukemias. Translocation t(6;11)(q21;q23) with MLL/HRX.

Sequence similarities Contains 1 fork-head DNA-binding domain.

Post-translational modifications In the presence of survival factors such as IGF-1, phosphorylated on Thr-32 and Ser-253 by AKT1/PKB. This phosphorylated form then interacts with 14-3-3 proteins and is retained in the cytoplasm. Survival factor withdrawal induces dephosphorylation and promotes translocation to the nucleus where the dephosphorylated protein induces transcription of target genes and triggers apoptosis. Although AKT1/PKB doesn't appear to phosphorylate Ser-315 directly, it may activate other kinases that trigger phosphorylation at this residue. Phosphorylated by STK4 on Ser-209 upon oxidative stress, which leads to dissociation from YWHAB/14-3-3-beta and nuclear translocation. Phosphorylated by PIM1.

Cellular localization Cytoplasm > cytosol. Nucleus. Translocates to the nucleus upon oxidative stress and in the absence of survival factors.

Images



Western blot - Anti-FOXO3A antibody (ab17026)

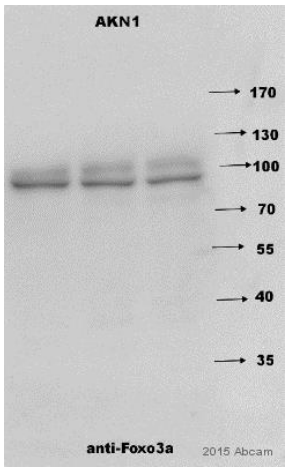
All lanes : Anti-FOXO3A antibody (ab17026) at 0.3 µg/ml

Lane 1 : Human Heart tissue lysate
Lane 2 : Human Heart tissue lysate with immunising peptide

Lysates/proteins at 35 µg per lane.

Predicted band size: 72 kDa
Observed band size: 70 kDa

Primary incubation was 1 hour. Detected by chemiluminescence.



Western blot - Anti-FOXO3A antibody (ab17026)
This image is courtesy of an anonymous Abreview

All lanes : Anti-FOXO3A antibody (ab17026) at 1/1000 dilution

All lanes : Human hepatic epithelial-like cell line (AKN-1) whole cell lysate

Lysates/proteins at 30 µg per lane.

Secondary
All lanes : Alkaline Phosphatase conjugated-mouse anti-goat IgG monoclonal at 1/15000 dilution

Developed using the ECL technique.

Performed under non-reducing conditions.

Predicted band size: 72 kDa
Observed band size: 95 kDa
Additional bands at: 100 kDa (possible non-specific binding)

Exposure time: 5 minutes

Blocked for 1 hour at 22°C.

Incubated with the primary antibody for 20 hours at 4°C.

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