


Product datasheet

Anti-FOXO3A (phospho T32) antibody ab26649

★★★★☆ 2 Abreviews 3 References 3 Images

Overview

Product name	Anti-FOXO3A (phospho T32) antibody
Description	Rabbit polyclonal to FOXO3A (phospho T32)
Host species	Rabbit
Tested applications	Suitable for: ELISA, WB, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Chicken, Xenopus laevis, Zebrafish 
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 1 - 100 of Human FOXO3A, phosphorylated at T32. Read Abcam's proprietary immunogen policy (Peptide available as ab27877 .)
Positive control	Recombinant Human FOXO3A protein (ab114191) can be used as a positive control in WB. This antibody gave a positive signal in the following whole cell lysates; HT29; Jurkat; 293T Cell extract - treated with Calyculin A,

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab26649** in the following tested applications.

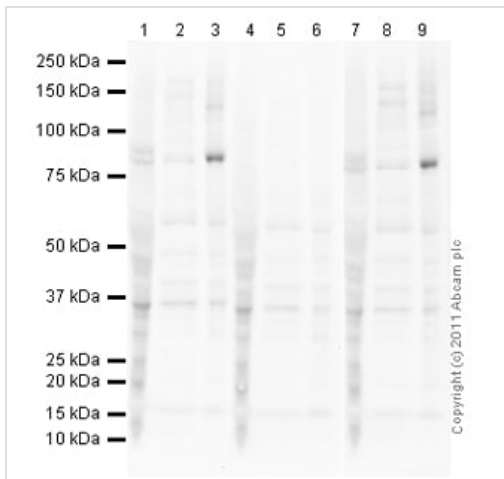
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
WB	★★★★☆	Use a concentration of 1 µg/ml. Detects a band of approximately 80 kDa (predicted molecular weight: 89,90 kDa).
IHC-P		Use at an assay dependent concentration. see image below

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 (phospho T32) antibody (ab26649)

All lanes : Anti-FOXO3A (phospho T32) antibody (ab26649) at 1 μ g/ml

Lane 1 : HT29 whole cell lysate (ab3952)

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 3 : 293T Cell extract - treated with Calyculin A

Lane 4 : HT29 whole cell lysate (ab3952) with Human FOXO3A (phospho T32) peptide (ab27877) at 1 mg/ml

Lane 5 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate with Human FOXO3A (phospho T32) peptide (ab27877) at 1 mg/ml

Lane 6 : 293T Cell extract - treated with Calyculin A with Human FOXO3A (phospho T32) peptide (ab27877) at 1 mg/ml

Lane 7 : HT29 whole cell lysate (ab3952) with Human FOXO3A peptide (ab27878) at 1 mg/ml

Lane 8 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate with Human FOXO3A peptide (ab27878) at 1 mg/ml

Lane 9 : 293T Cell extract - treated with Calyculin A with Human FOXO3A peptide (ab27878) at 1 mg/ml

Lysates/proteins at 10 μ g per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

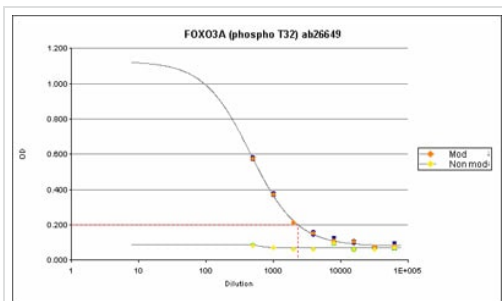
Performed under reducing conditions.

Predicted band size: 89,90 kDa

Observed band size: 80 kDa

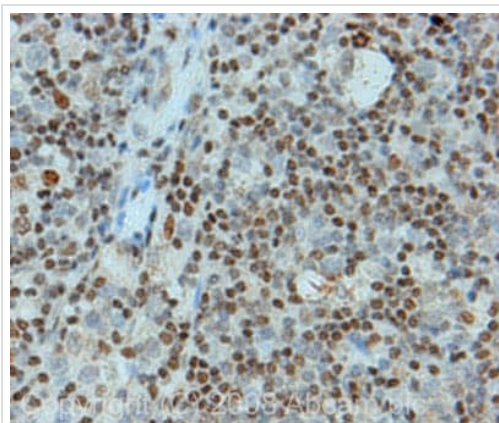
[why is the actual band size different from the predicted?](#)

Additional bands at: 35 kDa. We are unsure as to the identity of these extra bands.



ELISA - Anti-FOXO3A (phospho T32) antibody (ab26649)

ab26649 specifically recognises the immunizing FOXO3A (phospho T32) peptide in ELISA analysis (orange dotted line), but not the corresponding unmodified peptide (yellow dotted line).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXO3A (phospho T32) antibody (ab26649)

IHC image of FOXO3A staining in human Hodgkin's lymphoma FFPE section, performed on a Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab26649, 5µg/ml, for 8 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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