




## Product datasheet

### Anti-FOXO3A antibody ab12162

★★★★☆ [11 Abreviews](#) [72 References](#) [4 Images](#)

#### Overview

<b>Product name</b>	Anti-FOXO3A antibody
<b>Description</b>	Rabbit polyclonal to FOXO3A
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Synthetic peptide: C-GLNVGNFTGAKQASSQ, with N-terminally added cysteine, conjugated to maleimide activated KLH, corresponding to amino acids 653-668 of Human FOXO3A. <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> 
<b>General notes</b>	<p>Storage in frost-free freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.</p> <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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.097% Sodium azide Constituents: 0.0268% PBS, 1% BSA
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab12162 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)	Use a concentration of 10 µg/ml.
ICC/IF	★★★★★ (2)	1/200.

## 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.

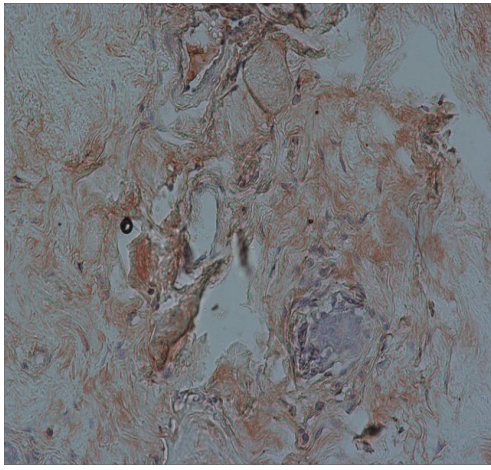
### Post-translational modifications

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

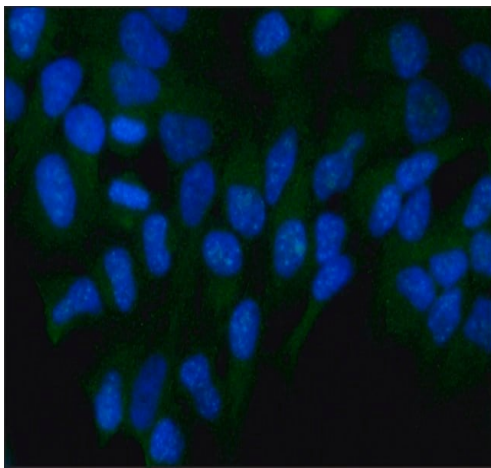
Cytoplasm > cytosol. Nucleus. Translocates to the nucleus upon oxidative stress and in the absence of survival factors.

## Images



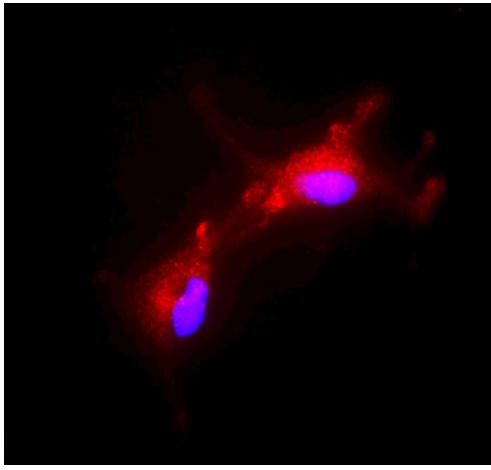
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast carcinoma tissue labelling FOXO3a with ab12162 at 10 µg/mL.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXO3A antibody (ab12162)



Immunocytochemistry/immunofluorescence analysis of human cervix carcinoma cells labelling FOXO3A with ab[12162 at 1/200 dilution.

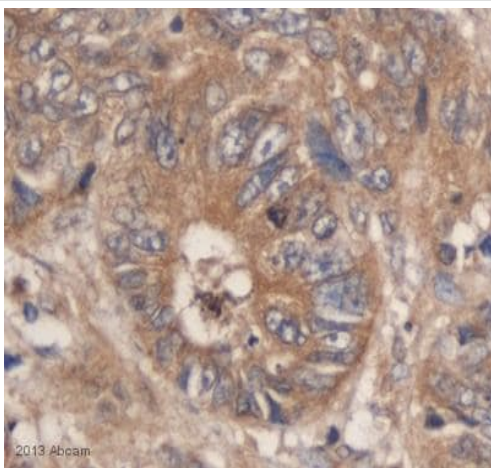
Immunocytochemistry/ Immunofluorescence - Anti-FOXO3A antibody (ab12162)



Immunocytochemistry/ Immunofluorescence - Anti-FOXO3A antibody (ab12162)

This image is courtesy of an anonymous Abreview

ab12162 staining FOXO3A in Rat fibroblast cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.03% Triton X-100 and blocked with 5% serum for 10 minutes at 25°C. Samples were incubated with primary antibody (1/300) for 1 hour at 25°C.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXO3A antibody (ab12162)

This image is courtesy of an anonymous Abreview

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human colon carcinoma tissue, staining FOXO3A with ab12162.

Tissue was fixed with formaldehyde and blocked with 1% serum for 1 hour at 24°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/100 in diluent) for 12 hours at 4°C. A biotinylated goat anti-rabbit polyclonal IgG (1/200) was used as the secondary antibody.

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

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