


## Product datasheet

# Anti-FOXO3A (phospho S253) antibody [EPR1951(2)] ab154786

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [40 References](#) [5 Images](#)

### Overview

<b>Product name</b>	Anti-FOXO3A (phospho S253) antibody [EPR1951(2)]
<b>Description</b>	Rabbit monoclonal [EPR1951(2)] to FOXO3A (phospho S253)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, Dot blot <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	MCF-7 cell lysate treated with IGF; Human endometrial carcinoma tissue; Human pancreas tissue.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR1951(2)
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab154786 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

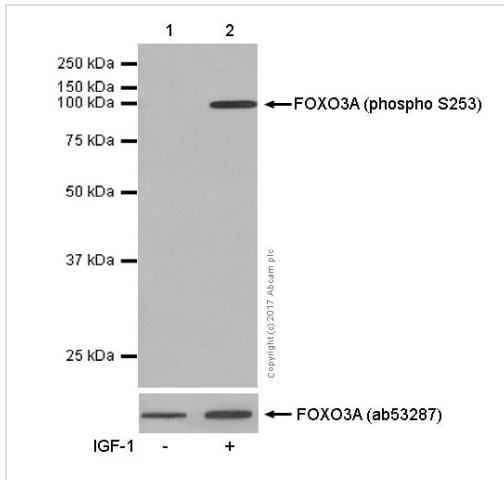
Application	Abreviews	Notes
<b>WB</b>	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 71 kDa.
<b>IHC-P</b>		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
<b>Dot blot</b>		Use at an assay dependent concentration.

**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IP.

## Target

<b>Function</b>	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'.
<b>Tissue specificity</b>	Ubiquitous.
<b>Involvement in disease</b>	Note=A chromosomal aberration involving FOXO3 is found in secondary acute leukemias. Translocation t(6;11)(q21;q23) with MLL/HRX.
<b>Sequence similarities</b>	Contains 1 fork-head DNA-binding domain.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	Cytoplasm > cytosol. Nucleus. Translocates to the nucleus upon oxidative stress and in the absence of survival factors.

## Images



Western blot - Anti-FOXO3A (phospho S253) antibody [EPR1951(2)] (ab154786)

**All lanes :** Anti-FOXO3A (phospho S253) antibody [EPR1951(2)] (ab154786) at 1/5000 dilution

**Lane 1 :** MCF-7 (Human breast adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** MCF-7 (Human breast adenocarcinoma epithelial cell) treated with IGF-1. Whole cell lysates

Lysates/proteins at 15 µg per lane.

### Secondary

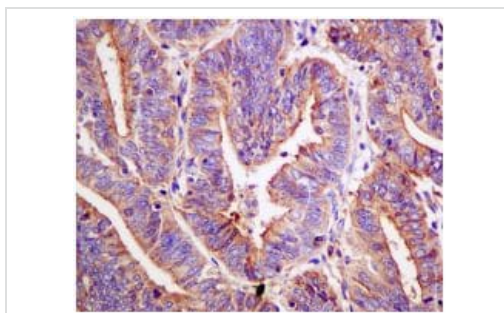
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 71 kDa

**Observed band size:** 90 kDa

**Exposure time:** 1 minute

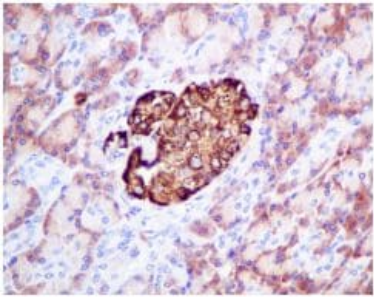
Blocking and diluting buffer and concentration: 5% NFDm/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXO3A (phospho S253) antibody [EPR1951(2)] (ab154786)

Immunohistochemical analysis of paraffin-embedded Human endometrial carcinoma tissue labeling FOXO3A (phospho S253) with ab154786 at 1/50 dilution.

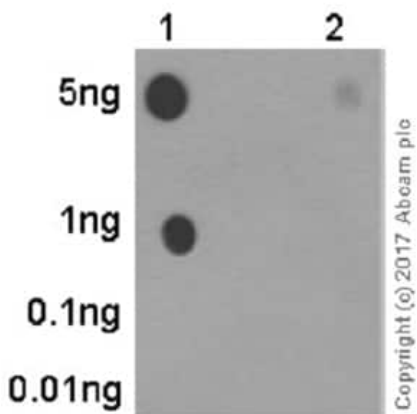
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXO3A (phospho S253) antibody [EPR1951(2)] (ab154786)

Immunohistochemical analysis of paraffin-embedded Human normal pancreas tissue labeling FOXO3A (phospho S253) with ab154786 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Dot Blot - Anti-FOXO3A (phospho S253) antibody [EPR1951(2)] (ab154786)

Dot Blot analysis of Lane 1: FOXO3A (pS253) phospho peptide and Lane 2: FOXO3A non-phospho peptide with ab154786 at 1/1000 dilution. 5% NFDN/TBST was used as the blocking and diluting buffer and concentration. **ab97051**, Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated was used as the secondary antibody at 1/100000 dilution. Exposure time: 3 minutes.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-FOXO3A (phospho S253) antibody  
[EPR1951(2)] (ab154786)

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

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