

## Product datasheet

### Anti-FOXO4/AFX antibody [EPR2150(3)] $\alpha$ b126757

Recombinant RabMAb

4 Images

#### Overview

Product name	Anti-FOXO4/AFX antibody [EPR2150(3)]
Description	Rabbit monoclonal [EPR2150(3)] to FOXO4/AFX
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> IP
Species reactivity	<b>Reacts with:</b> Human
Immunogen	Synthetic peptide within Human FOXO4/AFX. The exact sequence is proprietary.
Positive control	HA-FOXO4/AFX transfected 293T cell lysate; HA-FOXO4.A3 (T32, S197 and S262 mutated to A) transfected 293T cell lysate; Human placenta tissue.
General notes	<p>This antibody was developed as part of a collaboration between Epitomics, the University of Utrecht, Netherlands and the lab of Tobias Dansen.</p> <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> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant ( $K_D$ )	$K_D = 1.81 \times 10^{-11}$ M





[Learn more about K<sub>D</sub>](#)

<b>Storage buffer</b>	pH: 7.20 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>	EPR2150(3)
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab126757 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>		1/10000 - 1/50000. Detects a band of approximately 65 kDa (predicted molecular weight: 53 kDa).
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. (heat up to 98 degrees C, below boiling, and then let cool for 10-20 min.)

**Application notes** Is unsuitable for IP.

## Target

<b>Function</b>	Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGF1R. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle.
<b>Tissue specificity</b>	Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas.
<b>Involvement in disease</b>	Note=A chromosomal aberration involving FOXO4 is found in acute leukemias. Translocation t(X;11)(q13;q23) with MLL/HRX. The result is a rogue activator protein.
<b>Sequence similarities</b>	Contains 1 fork-head DNA-binding domain.
<b>Post-translational modifications</b>	Acetylation by CBP, which is induced by peroxidase stress, inhibits transcriptional activity. Deacetylation by SIRT1 is NAD-dependent and stimulates transcriptional activity. Phosphorylation by PKB/AKT1 inhibits transcriptional activity and is responsible for cytoplasmic localization. Monoubiquitinated; monoubiquitination is induced by oxidative stress and reduced by deacetylase inhibitors; results in its relocalization to the nucleus and its increased transcriptional activity. Deubiquitinated by USP7; deubiquitination is induced by oxidative stress; enhances its interaction with USP7 and consequently, deubiquitination; increases its translocation to the cytoplasm and inhibits its transcriptional activity. Hydrogene-peroxide-induced ubiquitination and

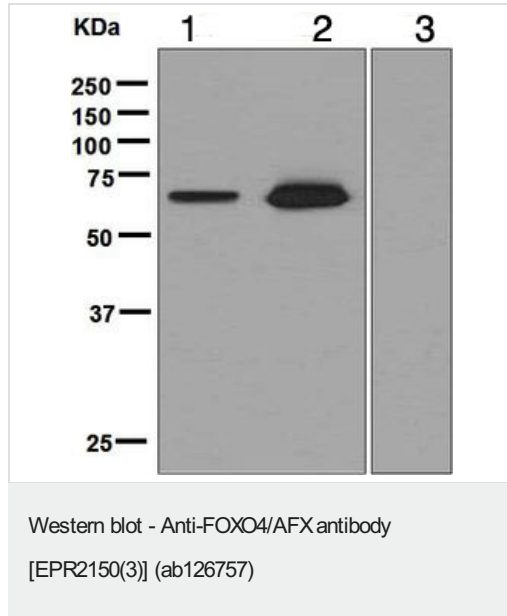
USP7-mediated deubiquitination have no major effect on its protein stability.

## Cellular localization

Cytoplasm. Nucleus. When phosphorylated, translocated from nucleus to cytoplasm.

Dephosphorylation triggers nuclear translocation. Monoubiquitination increases nuclear localization. When deubiquitinated, translocated from nucleus to cytoplasm.

## Images



**All lanes :** Anti-FOXO4/AFX antibody [EPR2150(3)] (ab126757) at 1/10000 dilution

**Lane 1 :** HA-FOXO4/AFX transfected 293T cell lysate

**Lane 2 :** HA-FOXO4.A3 (T32, S197 and S262 mutated to A) transfected 293T cell lysate

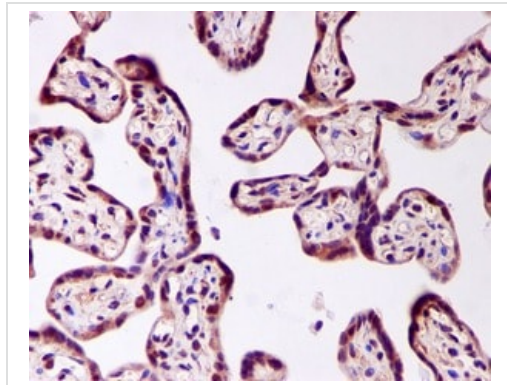
**Lane 3 :** 293T (Human embryonic kidney epithelial cell) cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** HRP-conjugated goat anti-rabbit at 1/2000 dilution

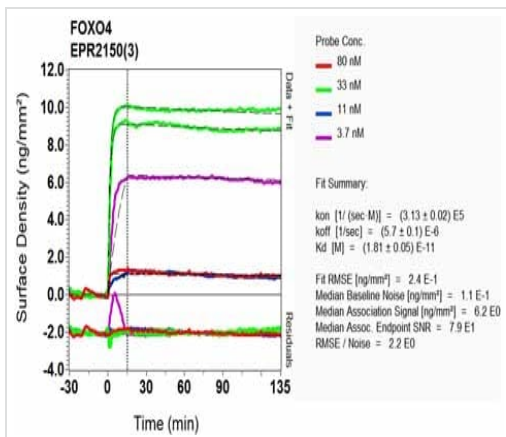
**Predicted band size:** 53 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXO4/AFX antibody [EPR2150(3)] (ab126757)

ab126757, at 1/100 dilution, staining FOXO4/AFX in paraffin-embedded Human placenta tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



SPR Scanning - Anti-FOXO4/AFX antibody  
[EPR2150(3)] (ab126757)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

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-FOXO4/AFX antibody [EPR2150(3)] (ab126757)

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