


Product datasheet

Anti-FOXO4/AFX antibody [EPR5442] α 128908

Recombinant RabMAb

★★★★★ 1 Abreviews 15 References 6 Images

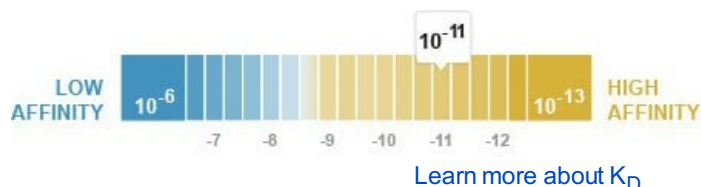
Overview

Product name	Anti-FOXO4/AFX antibody [EPR5442]
Description	Rabbit monoclonal [EPR5442] to FOXO4/AFX
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IP Unsuitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide within Human FOXO4/AFX aa 450-550 (C terminal). The exact sequence is proprietary.
Positive control	293T, fetal heart, fetal muscle, fetal lung, and HuT-78 lysates. Permeabilized 293T cells.
General notes	<p>This antibody was developed as part of a collaboration between the University of Utrecht in the 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"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</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 = 3.00 x 10⁻¹¹ M



Storage buffer pH: 7.20
Preservative: 0.01% Sodium azide
Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EPR5442

Isotype IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab128908 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
Flow Cyt (Intra)		1/100 - 1/500. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/1000 - 1/10000. Detects a band of approximately 65 kDa (predicted molecular weight: 53 kDa).
IP		1/10 - 1/100.

Application notes Is unsuitable for IHC-P.

Target

Function Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGF1. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle.

Tissue specificity Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas.

Involvement in disease 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.

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

Post-translational modifications 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.

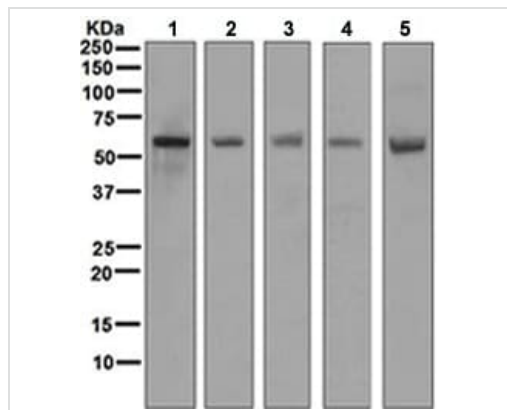
Monoubiquitinated; monoubiquitination is induced by oxidative stress and reduced by deacetylase inhibitors; results in its relocalization to the nucleus and its increased transcriptional activity. Deubiquitinated by USP7; deubiquitination is induced by oxidative stress; enhances its interaction with 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



Western blot - Anti-FOXO4/AFX antibody [EPR5442] (ab128908)

All lanes : Anti-FOXO4/AFX antibody [EPR5442] (ab128908) at 1/1000 dilution

Lane 1 : 293T lysate

Lane 2 : Fetal heart lysate

Lane 3 : Fetal muscle lysate

Lane 4 : Fetal lung lysate

Lane 5 : HuT-78 lysate

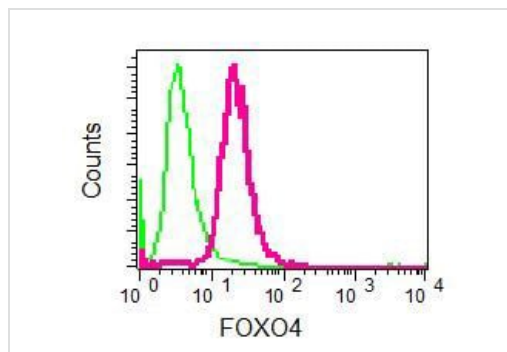
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat-anti-rabbit HRP at 1/2000 dilution

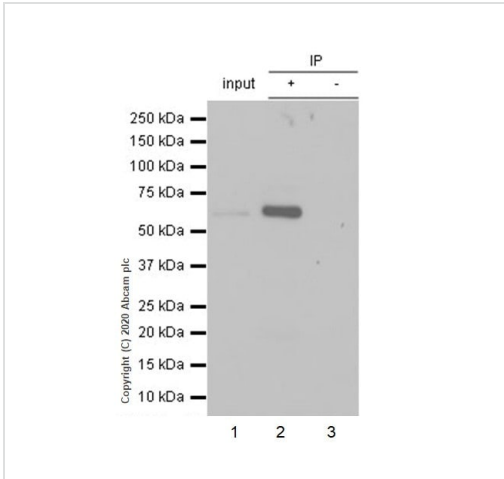
Predicted band size: 53 kDa

Observed band size: 65 kDa



Flow Cytometry (Intracellular) - Anti-FOXO4/AFX antibody [EPR5442] (ab128908)

Intracellular flow cytometric analysis of FOXO4/AFX in permeabilized HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cells using ab128908 at 1/100 dilution (Red) compared to a non-specific negative control antibody (green).



Immunoprecipitation - Anti-FOXO4/AFX antibody [EPR5442] (ab128908)

Purified ab128908 at 1/100 dilution (2µg) immunoprecipitating FOXO4/AFX in 293T whole cell lysate.

Lane 1 (input): 293T (Human embryonic kidney epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab128908 + 293T whole cell lysate.

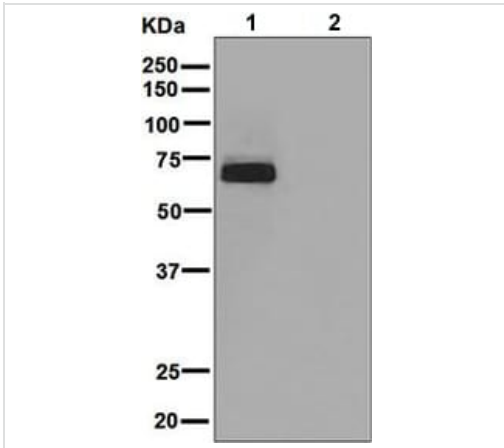
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab128908 in 293T whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 65 kDa



Western blot - Anti-FOXO4/AFX antibody [EPR5442] (ab128908)

All lanes : Anti-FOXO4/AFX antibody [EPR5442] (ab128908) at 1/1000 dilution

Lane 1 : 293T transfected with FOXO4/AFX

Lane 2 : 293T cell lysate

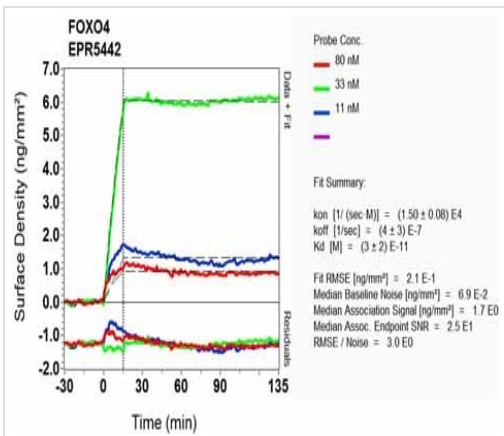
Secondary

Lane 1 : Goat-anti-rabbit HRP at 1/2000 dilution

Lane 2 : Goat-anti-rabbit HRP at 1/2000 dilution

Predicted band size: 53 kDa

Observed band size: 63 kDa



OIR-D Scanning - Anti-FOXO4/AFX antibody [EPR5442] (ab128908)

Equilibrium disassociation 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 [EPR5442] (ab128908)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors