

## **FOXO4 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21547c

## **Specification**

# FOXO4 Antibody (Center) - Product Information

Application WB, IF,E
Primary Accession P98177
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 53684

# FOXO4 Antibody (Center) - Additional Information

**Gene ID 4303** 

#### **Other Names**

Forkhead box protein O4, Fork head domain transcription factor AFX1, FOXO4, AFX, AFX1, MLLT7

## Target/Specificity

This FOXO4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 206-240 amino acids from the Central region of human FOXO4.

### **Dilution**

WB~~1:1000-1:2000

IF~~1:25

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

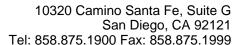
#### **Precautions**

FOXO4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# FOXO4 Antibody (Center) - Protein Information

Name FOXO4

Synonyms AFX, AFX1, MLLT7





**Function** Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGFBP1. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle. Involved in increased proteasome activity in embryonic stem cells (ESCs) by activating expression of PSMD11 in ESCs, leading to enhanced assembly of the 26S proteasome, followed by higher proteasome activity.

### **Cellular Location**

Cytoplasm. Nucleus. Note=When phosphorylated, translocated from nucleus to cytoplasm. Dephosphorylation triggers nuclear translocation. Monoubiquitination increases nuclear localization. When deubiquitinated, translocated from nucleus to cytoplasm

#### **Tissue Location**

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

### FOXO4 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

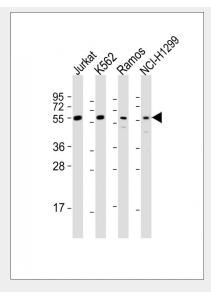
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## FOXO4 Antibody (Center) - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling FOXO4 with AP21547c at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).





All lanes : Anti-FOXO4 Antibody (Center) at 1:1000-1:2000 dilution Lane 1: Jurkat whole cell lysates Lane 2: K562 whole cell lysates Lane 3: Ramos whole cell lysates Lane 4: NCI-H1299 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## FOXO4 Antibody (Center) - Background

Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGFBP1. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle. Involved in increased proteasome activity in embryonic stem cells (ESCs) by activating expression of PSMD11 in ESCs, leading to enhanced assembly of the 26S proteasome, followed by higher proteasome activity.

# FOXO4 Antibody (Center) - References

Peters U., et al. Hum. Genet. 100:569-572(1997).
Borkhardt A., et al. Oncogene 14:195-202(1997).
Yang Z., et al. J. Biol. Chem. 277:8068-8075(2002).
Ross M.T., et al. Nature 434:325-337(2005).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.