

Anti-FOXO4 (pS197) Antibody

Rabbit polyclonal antibody to FOXO4 (pS197) Catalog # AP59622

Specification

Anti-FOXO4 (pS197) Antibody - Product Information

Application WB, IF/IC, IHC

Primary Accession P98177
Other Accession Q9WVH3

Reactivity Human, Mouse, Rat, Monkey, Pig

Host Rabbit
Clonality Polyclonal
Calculated MW 53684

Anti-FOXO4 (pS197) Antibody - Additional Information

Gene ID 4303

Other Names

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

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human FOXO4. The exact sequence is proprietary.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-FOXO4 (pS197) Antibody - 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

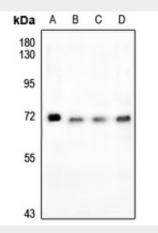
Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas

Anti-FOXO4 (pS197) Antibody - Protocols

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

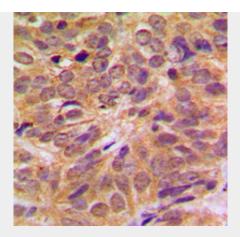
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-FOXO4 (pS197) Antibody - Images

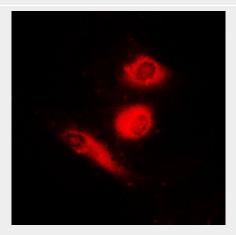


Western blot analysis of FOXO4 (pS197) expression in LO2 (A), Panc1 (B), PC12 (C), AML12 (D) whole cell lysates.





Immunohistochemical analysis of FOXO4 (pS197) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of FOXO4 (pS197) staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 $^{\circ}$ C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Anti-FOXO4 (pS197) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human FOXO4. The exact sequence is proprietary.