

Anti-FOXO4 (pS197) Antibody

Rabbit polyclonal antibody to FOXO4 (pS197) Catalog # AP59622

Product Information

Application	WB, IF/IC, IHC
Primary Accession	<u>P98177</u>
Other Accession	<u>Q9WVH3</u>
Reactivity	Human, Mouse, Rat, Monkey, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53684

Additional Information

Gene ID	4303
Other Names	AFX; AFX1; MLLT7; Forkhead box protein O4; Fork head domain transcription factor AFX1
Target/Specificity	Recognizes endogenous levels of FOXO4 (pS197) protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500)
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

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	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

Background

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

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 °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.

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