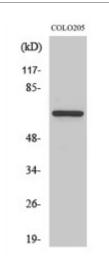


Anti-FoxO4 antibody



Description

4

Rabbit polyclonal to FoxO4.

Model STJ93130

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, IHC, WB

Immunogen Synthesized peptide derived from human FoxO4 around the non-

phosphorylation site of S197.

Immunogen Region 140-220 aa

Gene ID <u>4303</u>

Gene Symbol <u>FOXO4</u>

Dilution range WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000

Specificity FoxO4 Polyclonal Antibody detects endogenous levels of FoxO4 protein.

Tissue Specificity Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

Isoform zeta is most abundant in the liver, kidney, and pancreas.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Forkhead box protein O4 Fork head domain transcription factor AFX1

Molecular Weight 70 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:7139OMIM:300033</u>

Alternative Names Forkhead box protein O4 Fork head domain transcription factor AFX1

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 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.

Post-translational Acetylation by CREBBP/CBP, which is induced by peroxidase stress, inhibits transcriptional activity. Deacetylation by SIRT1 is NAD-dependent and

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. May be

phosphorylated at multiple sites by NLK. 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.

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