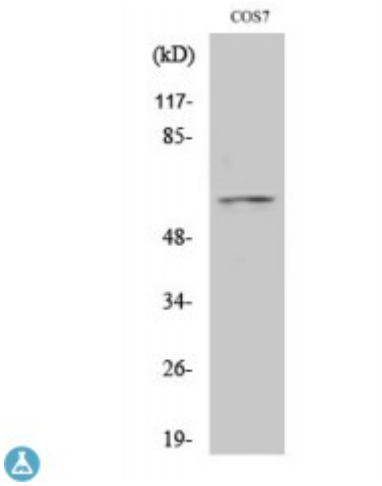
Anti-FoxO4 antibody



Description	Rabbit polyclonal to FoxO4.

Model	STJ93129
Host	Rabbit
Reactivity	Human, Mouse, Simian
Applications	ELISA, IF, WB
Immunogen	Synthesized peptide derived from human FoxO4 around the non-phosphorylation site of T451.
Immunogen Region	390-470 aa
Gene ID	4303
Gene Symbol	FOXO4
Dilution range	WB 1:500-1:2000IF 1:200-1:1000ELISA 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	55 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	HGNC:7139OMIM:300033
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 Modifications	Acetylation by CREBBP/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. 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.