

FoxO4 (phospho Thr451) Polyclonal Antibody

Catalog No: YP0382

Reactivity: Human; Mouse

Applications: WB;ELISA

Target: FoxO4

Fields: >>Ras signaling pathway;>>FoxO signaling pathway;>>Shigellosis

Gene Name: FOXO4

Protein Name: Forkhead box protein O4

P98177

Q9WVH3

Human Gene Id: 4303

Human Swiss Prot

No:

Mouse Gene ld: 54601

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

FOXO4 around the phosphorylation site of Thr451. AA range:417-466

Specificity: Phospho-FoxO4 (T451) Polyclonal Antibody detects endogenous levels of

FoxO4 protein only when phosphorylated at T451.

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

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 55kD

Cell Pathway: Insulin Receptor; B Cell Receptor; Protein_Acetylation

Background: This gene encodes a member of the O class of winged helix/forkhead

transcription factor family. Proteins encoded by this class are regulated by factors

involved in growth and differentiation indicating they play a role in these

processes. A translocation involving this gene on chromosome X and the homolog of the Drosophila trithorax gene, encoding a DNA binding protein, located on chromosome 11 is associated with leukemia. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2010],

Function: disease: A chromosomal aberration involving FOXO4 is found in acute

leukemias. Translocation t(X;11)(q13;q23) with MLL/HRX. The result is a rogue activator protein.,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.,pharmaceutical:A constitutively active FOXO4 mutant where phosphorylation sites Thr-32, Ser-187 and Ser-262 have been mutated to alanine may have therapeutic potential in ERBB2/HER2-overexpressing cancers as it inhibits ERBB2-mediated cell survival, transformation and tumorigenicity.,PTM:Acetylation by CBP, which is

induced by peroxidase stress, inhibits transcriptional activity. Dea

Subcellular Location : Cytoplasm. Nucleus. When phosphorylated, translocated from nucleus to cytoplasm. Dephosphorylation triggers nuclear translocation. Monoubiquitination increases nuclear localization. When deubiquitinated, translocated from nucleus

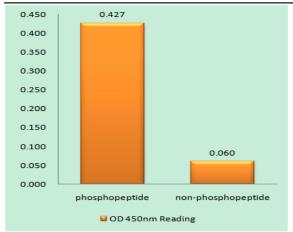
to cytoplasm.

Expression: Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform

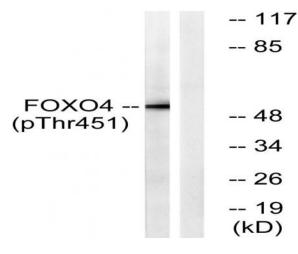
zeta is most abundant in the liver, kidney, and pancreas.

Products Images

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Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using FOXO4 (Phospho-Thr451) Antibody



Western blot analysis of lysates from HUVEC cells treated with EGF 200ng/ml 5', using FOXO4 (Phospho-Thr451) Antibody. The lane on the right is blocked with the phospho peptide.