

FoxO4 Polyclonal Antibody

Catalog No: YT1765

Reactivity: Human; Mouse

Applications: WB;IHC;IF;ELISA

Target: FoxO4

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

Gene Name: FOXO4

Protein Name: Forkhead box protein O4

Human Gene Id: 4303

Human Swiss Prot

P98177

Q9WVH3

No:

Mouse Gene ld: 54601

Mouse Swiss Prot

No:

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

AFX. AA range:164-213

Specificity: FoxO4 Polyclonal Antibody detects endogenous levels of FoxO4 protein.

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. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



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

Observed Band: 70kD

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

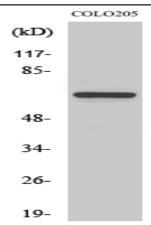
to cytoplasm.

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

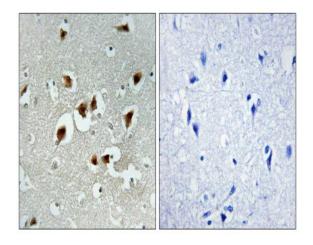
zeta is most abundant in the liver, kidney, and pancreas.

Products Images

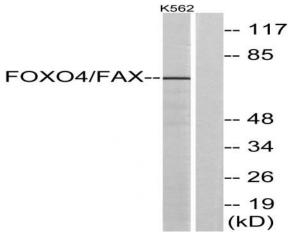
2/3



Western Blot analysis of various cells using FoxO4 Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human brain carcinoma tissue, using AFX Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from K562 cells, treated with serum, using AFX Antibody. The lane on the right is blocked with the synthesized peptide.