

FoxO4 (Phospho Thr451) Rabbit pAb

CatalogNo: YP0382

Orthogonal Validated 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse

Applications

- WB, ELISA

MW

- 55kD (Observed)

Isotype

- IgG

Recommended Dilution Ratios

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

Storage

Storage*

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

Formulation

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

Basic Information

Clonality

Polyclonal

Immunogen Information

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. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites): LGtPV

| Target Information

Gene name FOXO4 AFX AFX1 MLLT7

Protein Name Forkhead box protein O4

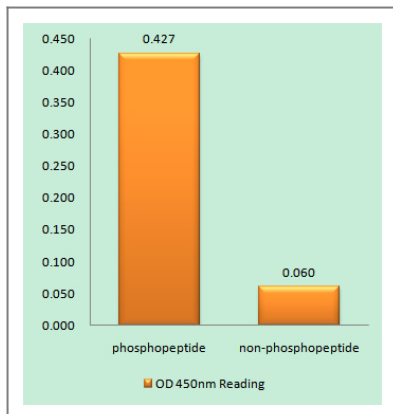
Organism	Gene ID	UniProt ID
Human	4303 ;	P98177 ;
Mouse	54601 ;	Q9WVH3 ;

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.

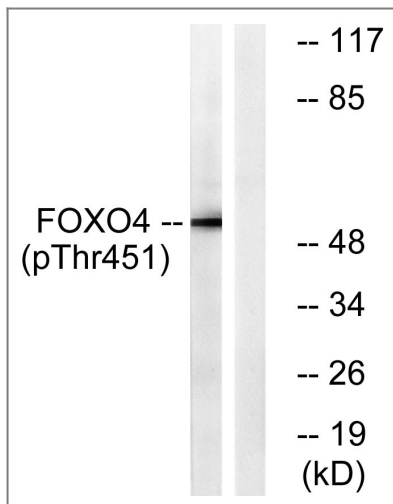
Tissue specificity Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas.

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. Deacetylation by SIRT1 is NAD-dependent and stimulates transcriptional activity.,PTM:Phosphorylation by PKB/AKT1 inhibits transcriptional activity and is responsible for cytoplasmic localization.,similarity:Contains 1 fork-head DNA-binding domain.,subcellular location:When phosphorylated, translocated from nucleus to cytoplasm. Dephosphorylation triggers nuclear translocation.,subunit:Interacts with CBP, MYOCD, SIRT1, SRF and YWHAZ. Acetylated by CBP and deacetylated by SIRT1. Binding of YWHAZ inhibits DNA-binding.,tissue specificity:Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas.,

| Validation Data



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.

Contact information

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Please scan the QR code to access additional product information:
FoxO4 (Phospho Thr451) Rabbit pAb

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