

**Product Name: FoxO4 (phospho Thr451) Rabbit Polyclonal Antibody**  
**Catalog #: APRab04706**

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## Summary

<b>Production Name</b>	FoxO4 (phospho Thr451) Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,ELISA
<b>Reactivity</b>	Human,Mouse

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phospho Antibody
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	FOXO4
<b>Alternative Names</b>	FOXO4; AFX; AFX1; MLLT7; Forkhead box protein O4; Fork head domain transcription factor AFX1
<b>Gene ID</b>	4303.0
<b>SwissProt ID</b>	P98177.The antiserum was produced against synthesized peptide derived from human FOXO4 around the phosphorylation site of Thr451. AA range:417-466

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. ELISA: 1:40000.
<b>Molecular Weight</b>	55kD

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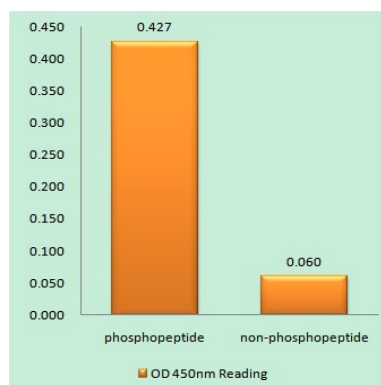
## Background

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],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.,

## Research Area

Insulin Receptor; B Cell Receptor; Protein\_Acetylation

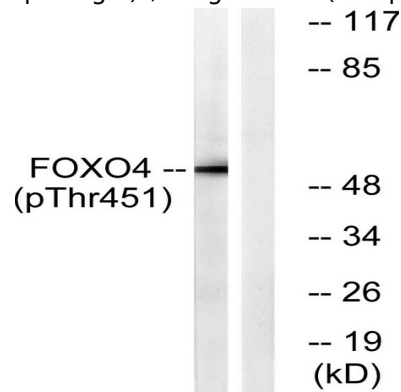
## Image Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-

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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.

### Note

For research use only.