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**Product Name: FoxO4 (phospho Ser262) Rabbit Polyclonal Antibody****Catalog #: APRab04705**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phosphorylated
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	54kDa

**Antigen Information**

<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
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human FOXO4 around the phosphorylation site of Ser262. AA range:228-277

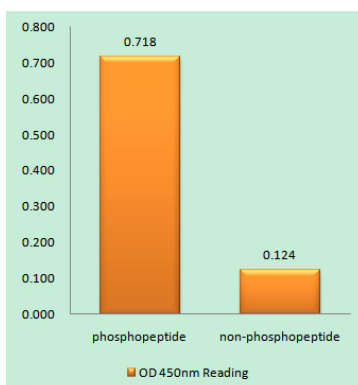
**Background**

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.,

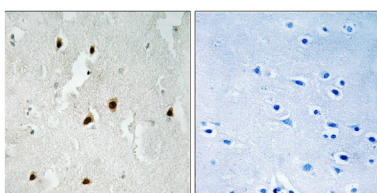
## Research Area

Insulin Receptor; B Cell Receptor; Protein\_Acetylation

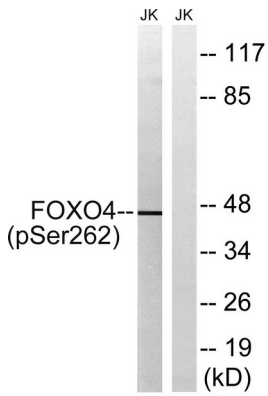
## Image Data



Enzyme-Linked Immunosorbent Assay ( Phospho-ELISA ) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using FOXO4 (Phospho-Ser262) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using FOXO4 (Phospho-Ser262) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with starved 24h, using FOXO4 (Phospho-Ser262) Antibody. The lane on the right is blocked with the phospho peptide.