



# FoxO4 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01739
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	FOXO4
<b>Protein Name</b>	Forkhead box protein O4
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human AFX. AA range:164-213
<b>Specificity</b>	FoxO4 Polyclonal Antibody detects endogenous levels of FoxO4 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	FOXO4; AFX; AFX1; MLLT7; Forkhead box protein O4; Fork head domain transcription factor AFX1
<b>Observed Band</b>	70kD
<b>Cell Pathway</b>	Cytoplasm. Nucleus. When phosphorylated, translocated from nucleus to cytoplasm. Dephosphorylation triggers nuclear translocation. Monoubiquitination increases nuclear localization. When deubiquitinated, translocated from nucleus to cytoplasm.
<b>Tissue Specificity</b>	Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas.
<b>Function</b>	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



### 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],

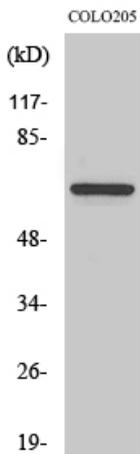
### matters needing attention

Avoid repeated freezing and thawing!

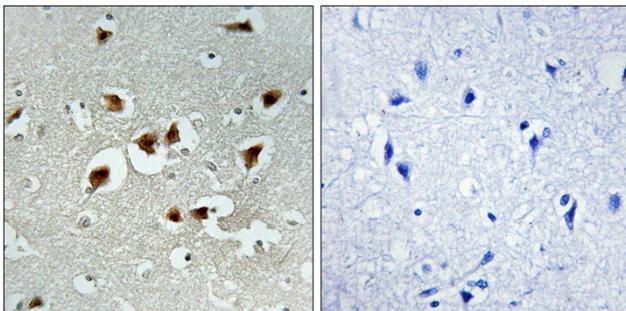
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

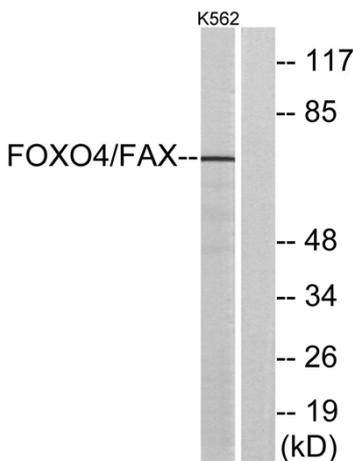
## Products Images



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.