



Rabbit Anti-phospho-FOXO4 (Thr451) antibody

SL13208R

Product Name:	phospho-FOXO4 (Thr451)
Chinese Name:	磷酸化叉头蛋白4抗体
Alias:	FOXO4 (phospho T451);p-FOXO4 (phospho T451); AFX(Phospho-Ser197); Fork head domain transcription factor AFX1; AFX; AFX1; Afxh; ALL1-fused gene from X chromosome; Fork head domain transcription factor AFX1; Forkhead box O4; Forkhead box protein O4; FOXO 4; Mixed lineage leukemia, translocated to, 7; MLLT7; Myeloid lymphoid or mixed lineage leukemia translocated to 7; Myeloid/lymphoid or mixed lineage leukemia, translocated to, 7; Putative fork head domain transcription factor AFX1; FOXO4_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	54kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human FOXO4 around the phosphorylation site of Thr451:LG(p-T)PV
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

FOXO4 is a forkhead transcription factor involved in the regulation of the insulin signaling pathway. It binds to insulin-response elements (IREs) and can activate transcription of IGFBP1. FOXO4 down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. It is also involved in negative regulation of the cell cycle.

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.

Subunit:

Interacts with CREBBP/CBP, CTNNB1, MYOCD, SIRT1, SRF and YWHAZ. Acetylated by CREBBP/CBP and deacetylated by SIRT1. Binding of YWHAZ inhibits DNA-binding. Interacts with USP7; the interaction is enhanced in presence of hydrogen peroxide and occurs independently of TP53. Interacts with NLK, and this inhibits monoubiquitination and transcriptional activity.

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.

Tissue Specificity:

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

Post-translational modifications:

Acetylation by CBP, which is induced by peroxidase stress, inhibits transcriptional activity. Deacetylation by SIRT1 is NAD-dependent and stimulates transcriptional activity. Phosphorylation by PKB/AKT1 inhibits transcriptional activity and is responsible for cytoplasmic localization.

DISEASE:

Note=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.

Similarity:

Contains 1 fork-head DNA-binding domain.

SWISS:

P98177

Product Detail:

Gene ID:
4303

Database links:

[Entrez Gene: 4303](#)Human

[Entrez Gene: 54601](#)Mouse

[Entrez Gene: 302415](#)Rat

[Omim: 300033](#)Human

[SwissProt: P98177](#)Human

[SwissProt: Q9WVH3](#)Mouse

[Unigene: 584654](#)Human

[Unigene: 240299](#)Mouse

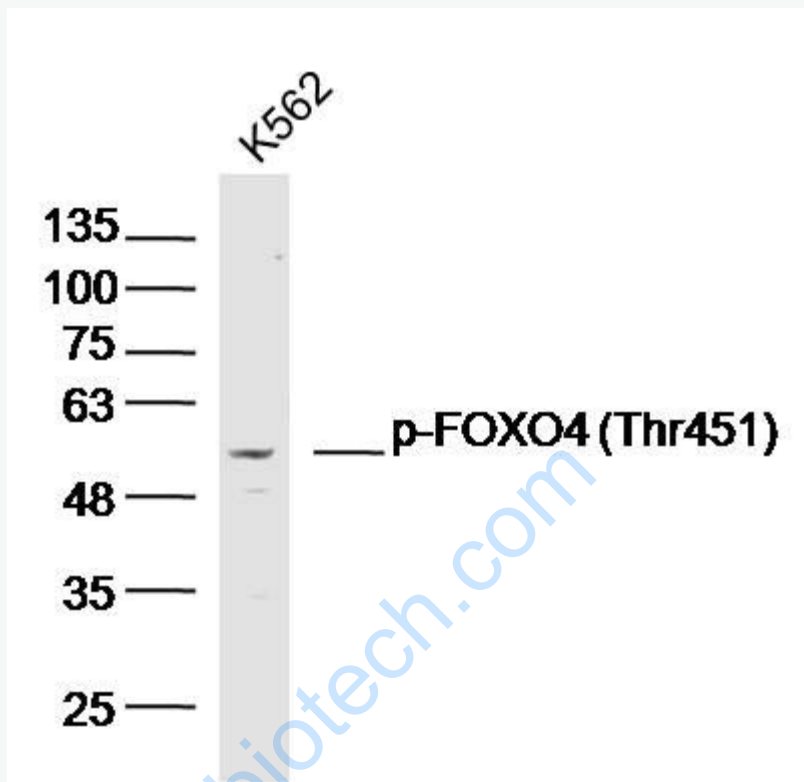
[Unigene: 19646](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Picture:



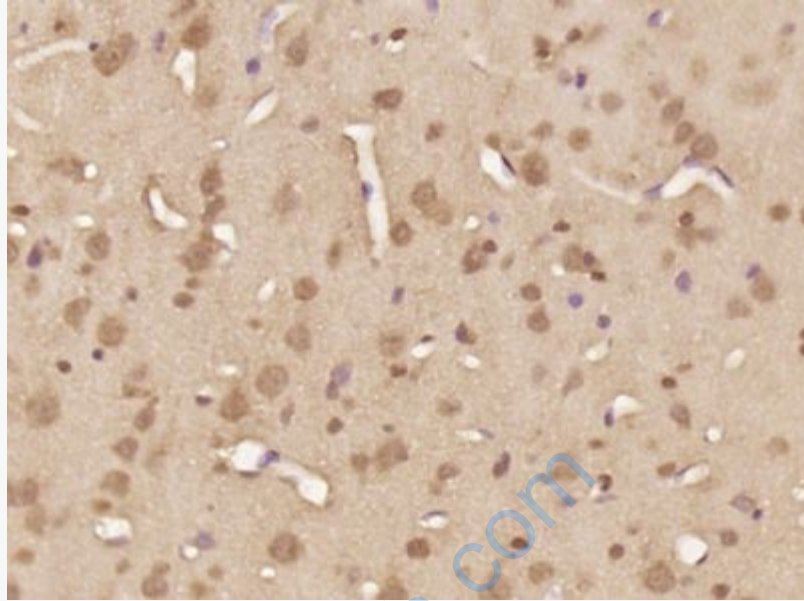
Sample: K562(human) Cell Lysate at 40 ug

Primary: Anti-p-FOXO4 (Thr451 (SL13208R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 54 kD

Observed band size: 54 kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-FOXO4 (Thr451)) Polyclonal Antibody, Unconjugated (SL13208R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.