



## Rabbit Anti-FOXO4 antibody

SL2766R

<b>Product Name:</b>	FOXO4
<b>Chinese Name:</b>	叉头蛋白O4抗体
<b>Alias:</b>	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.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	53kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human FOXO4:151-250/505
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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 CREBBP/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. May be phosphorylated at multiple sites by NLK.

Monoubiquitinated; monoubiquitination is induced by oxidative stress and reduced by deacetylase inhibitors; results in its relocalization to the nucleus and its increased transcriptional activity. Deubiquitinated by USP7; deubiquitination is induced by oxidative stress; enhances its interaction with USP7 and consequently, deubiquitination; increases its translocation to the cytoplasm and inhibits its transcriptional activity.

Hydrogene-peroxide-induced ubiquitination and USP7-mediated deubiquitination have no major effect on its protein stability.

**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

**Gene ID:**  
4303

**Database links:**

[Entrez Gene: 4303](#)Human

[Entrez Gene: 54601](#)Mouse

[Entrez Gene: 302415](#)Rat

[Oimim: 300033](#)Human

[SwissProt: P98177](#)Human

[SwissProt: Q9WVH3](#)Mouse

[Unigene: 584654](#)Human

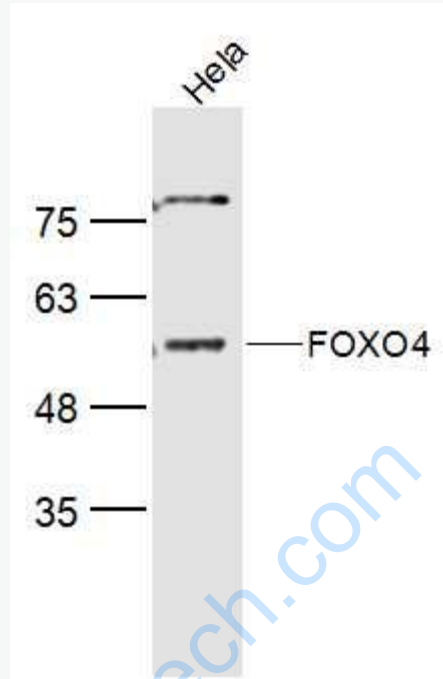
[Unigene: 240299](#)Mouse

[Unigene: 19646](#)Rat

**Important Note:**

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

Picture:



Sample:

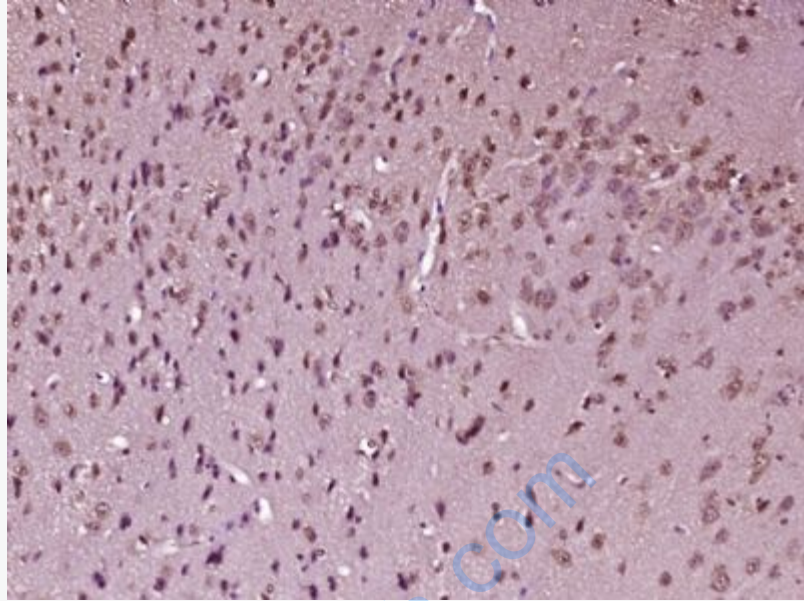
Hela(Human) Cell Lysate at 40 ug

Primary: Anti-FOXO4 (SL2766R) at 1/300 dilution

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

Predicted band size: 53 kD

Observed band size: 53 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse 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 (FOXO4) Polyclonal Antibody, Unconjugated (SL2766R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.