



FoxO4 (phospho Ser197) Polyclonal Antibody

Catalog No	YP-Ab-01243
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	FOXO4
Protein Name	Forkhead box protein O4
Immunogen	The antiserum was produced against synthesized peptide derived from human AFX around the phosphorylation site of Ser197. AA range:164-213
Specificity	Phospho-FoxO4 (S197) Polyclonal Antibody detects endogenous levels of FoxO4 protein only when phosphorylated at S197.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	FOXO4; AFX; AFX1; MLLT7; Forkhead box protein O4; Fork head domain transcription factor AFX1
Observed Band	70kD
Cell Pathway	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.
Function	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 IGF1. 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],

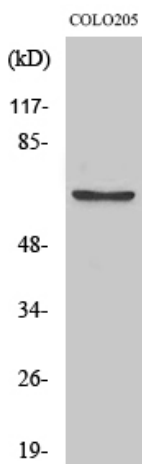
matters needing attention

Avoid repeated freezing and thawing!

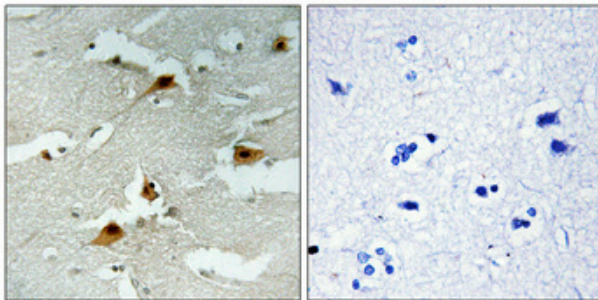
Usage suggestions

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

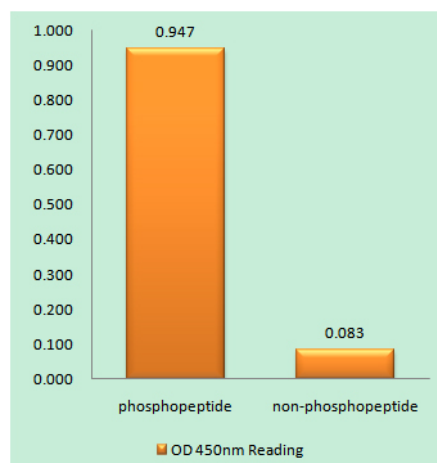
Products Images



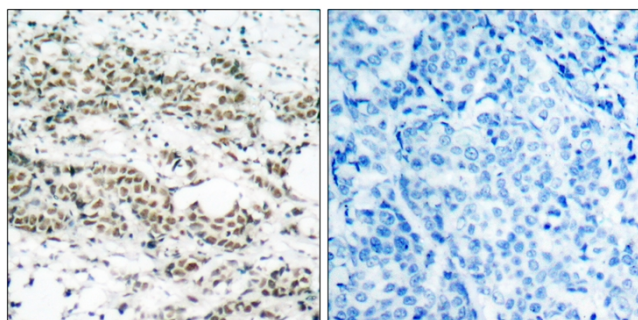
Western Blot analysis of various cells using Phospho-FoxO4 (S197) Polyclonal Antibody



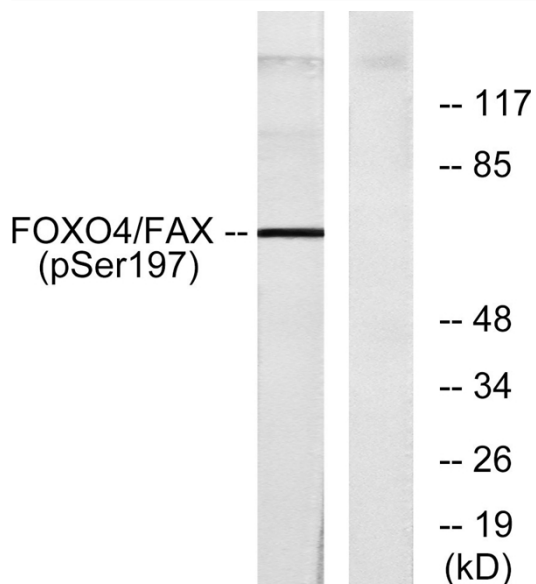
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using AFX (Phospho-Ser197) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using AFX (Phospho-Ser197) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from 293 cells treated with serum, using AFX (Phospho-Ser197) Antibody. The lane on the right is blocked with the phosphopeptide.