

FoxO3A (phospho Ser253) Polyclonal Antibody

Catalog No: YP0115

Reactivity: Human; Mouse; Rat; Zebrafish

Applications: WB;IHC;IF;ELISA

Target: FoxO3A

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>Chemokine signaling

pathway;>>FoxO signaling pathway;>>Mitophagy - animal;>>PI3K-Akt signaling

pathway;>>AMPK signaling pathway;>>Longevity regulating

pathway;>>Longevity regulating pathway - multiple species;>>Cellular senescence;>>Neurotrophin signaling pathway;>>Prolactin signaling

pathway;>>Alcoholic liver disease;>>Shigellosis;>>Chemical carcinogenesis - reactive oxygen species;>>Endometrial cancer;>>Non-small cell lung cancer

Gene Name: FOXO3

Protein Name: Forkhead box protein O3

O43524

Q9WVH4

Human Gene Id: 2309

Human Swiss Prot

No:

Mouse Gene Id: 56484

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

FKHRL1 around the phosphorylation site of Ser253. AA range:220-269

Specificity: Phospho-FoxO3A (S253) Polyclonal Antibody detects endogenous levels of

FoxO3A protein only when phosphorylated at S253.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not



Dilution: yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:**

Observed Band: 90kD

Cell Pathway: Insulin Receptor; B Cell Receptor; PI3K/Akt; Protein Acetylation

This gene belongs to the forkhead family of transcription factors which are **Background:**

> characterized by a distinct forkhead domain. This gene likely functions as a trigger for apoptosis through expression of genes necessary for cell death. Translocation of this gene with the MLL gene is associated with secondary acute leukemia. Alternatively spliced transcript variants encoding the same protein have

been observed. [provided by RefSeq, Jul 2008],

Function: disease: A chromosomal aberration involving FOXO3 is found in secondary

acute leukemias. Translocation t(6;11)(g21;g23) with

MLL/HRX., function: Transcriptional activator which triggers apoptosis in the absence of survival factors, including neuronal cell death upon oxidative stress. Recognizes and binds to the DNA sequence 5'-[AG]TAAA[TC]A-3'.,PTM:In the presence of survival factors such as IGF-1, phosphorylated on Thr-32 and Ser-253 by AKT1/PKB. This phosphorylated form then interacts with 14-3-3 proteins and is retained in the cytoplasm. Survival factor withdrawal induces dephosphorylation and promotes translocation to the nucleus where the dephosphorylated protein induces transcription of target genes and triggers apoptosis. Although AKT1/PKB doesn't appear to phosphorylate Ser-315 directly,

it may activate other kinases that trigger phosphorylation at this residue.

Phosphorylated by ST

Subcellular Location:

Cytoplasm, cytosol . Nucleus . Mitochondrion matrix . Mitochondrion outer membrane; Peripheral membrane protein; Cytoplasmic side. Retention in the cytoplasm contributes to its inactivation (PubMed:10102273, PubMed:15084260,

PubMed:16751106). Translocates to the nucleus upon oxidative stress and in the absence of survival factors (PubMed:10102273, PubMed:16751106).

Translocates from the cytosol to the nucleus following dephosphorylation in response to autophagy-inducing stimuli (By similarity). Translocates in a AMPKdependent manner into the mitochondrion in response to metabolic stress (PubMed:23283301, PubMed:29445193). Serum deprivation increases

localization to the nucleus, leading to activate expression of SOX9 and

subsequent chondrogenesis (By similarity). .

Expression: Ubiquitous.



Sort:	6256
OUIL.	0200

No2: 13129S

No4: 1

Host: Rabbit

Modifications: Phospho

Products Images

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