



FoxO3a (phospho-Ser318/321) rabbit pAb

Catalog No	YP-Ab-01444
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	FOXO3 FKHRL1 FOXO3A
Immunogen	Synthesized phosho peptide around human FoxO3a (Ser318 and 321)
Specificity	This antibody detects endogenous levels of Human Mouse Rat FoxO3a (phospho-Ser318 or 321)
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 serum by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AF6q21;AF6q21 protein;DKFZp781A0677;FKHR2;FKHRL 1;FKHRL1;FKHRL1P2;Forkhead (Drosophila) homolog (rhabdomyosarcoma) like 1; Forkhead box O3;Forkhead box O3A;Forkhead box protein O3;Forkhead box protein O3A;Forkhead Drosophila homolog of in rhabdomyosarcoma like 1; Forkhead homolog (rhabdomyosarcoma) like 1;Forkhead in rhabdomyosarcoma like 1;Forkhead in rhabdomyosarcoma-like 1;FOX O3A;FOXO2;foxo3; FOXO3_HUMAN;FOXO3A;MGC12739;MGC31925;FOXO3 FKHRL1 FOXO3A; FoxO3a (Ser318/321);Forkhead box protein O3 (AF6q21 protein) (Forkhead in rhabdomyosarcoma-like 1)
Observed Band	71kDa
Calculated Molecular Weight	97kDa
Cell Pathway	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 AMPK-dependent 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). .

Tissue Specificity	Ubiquitous.
Function	disease:A chromosomal aberration involving FOXO3 is found in secondary acute leukemias. Translocation t(6;11)(q21;q23) 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
Background	This gene belongs to the forkhead family of transcription factors which are 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],
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.

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