



FoxO3A (Acetyl Lys569) mouse mAb

Catalog No	BYmab-00883
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	FOXO3 FKHRL1 FOXO3A
Protein Name	FoxO3A (Acetyl Lys569)
Immunogen	Synthesized peptide derived from human FoxO3A (Acetyl Lys569)
Specificity	This antibody detects endogenous levels of Human,Mouse,Rat FoxO3A (Acetyl Lys569)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Forkhead box protein O3 (AF6q21 protein;Forkhead in rhabdomyosarcoma-like 1)
Observed Band	90kD
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	ovarian follicle development, ovulation from ovarian follicle, initiation of primordial ovarian follicle growth, antral ovarian follicle growth, oocyte

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	maturation, reproductive developmental process, transcription, regulation of transcription, DNA-dependent, regulation of transcription from RNA polymerase II promoter, apoptosis, induction of apoptosis, response to DNA damage stimulus, gamete generation, germ cell development, female gamete generation, sex differentiation, cell death, gonad development, female gonad development, positive regulation of biosynthetic process, oocyte differentiation, positive regulation of macromolecule biosynthetic process, positive regulation of macromolecule metabolic process, positive regulation of gene expression, regulation of cell death, positive regulation of cell death, programmed cell death, induction of programmed cell death, death, sexual reproducti
Background	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 STK4 on Ser-209 upon oxidative stress, which leads to dissociation from YWHAB/14-3-3-beta and nuclear translocation. similarity: Contains 1 fork-head DNA-binding domain. subcellular location: Translocates to the nucleus upon oxidative stress and in the absence of survival factors. subunit: Interacts with YWHAB/14-3-3-beta and YWHAZ/14-3-3-zeta, which are required for cytosolic sequestration. Upon oxidative stress, interacts with STK4, which disrupts interaction with YWHAB/14-3-3-beta and leads to nuclear translocation. tissue specificity: Ubiquitous.
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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