

FoxO3A (Acetyl Lys569) rabbit pAb

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| Catalog No : | YK0112 |
| Reactivity : | Human;Mouse;Rat |
| Applications : | WB;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 FKHRL1 FOXO3A |
| Protein Name : | FoxO3A (Acetyl Lys569) |
| Human Gene Id : | 2309 |
| Human Swiss Prot No : | O43524 |
| Mouse Gene Id : | 56484 |
| Mouse Swiss Prot No : | Q9WVH4 |
| 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 : | Polyclonal, Rabbit,IgG |
| Dilution : | WB 1:1000-2000 ELISA 1:5000-20000 |

Purification : The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.

Concentration : 1 mg/ml

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

Observed Band : 90kD

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.,

Function : ovarian follicle development, ovulation from ovarian follicle, initiation of primordial ovarian follicle growth, antral ovarian follicle growth, oocyte 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

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 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). .

Expression : Ubiquitous.

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