

FOXO1(C-term) mouse mAb

YM1279 Catalog No:

Reactivity: Human

Applications: WB

Target: FoxO1

Fields: >>FoxO signaling pathway;>>AMPK signaling pathway;>>Longevity regulating

> pathway:>>Longevity regulating pathway - multiple species:>>Cellular senescence;>>Insulin signaling pathway;>>Thyroid hormone signaling pathway;>>Glucagon signaling pathway;>>Insulin resistance;>>AGE-RAGE

signaling pathway in diabetic complications;>>Alcoholic liver

disease;>>Shigellosis;>>Human papillomavirus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Prostate cancer

Gene Name: foxo1

Human Gene Id: 2308

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Purified recombinant human FOXO1(C-terminus) protein fragments expressed Immunogen:

in E.coli.

Q12778

Q9R1E0

Specificity: This antibody detects endogenous levels of FOXO1(C-terminus) and does not

cross-react with related proteins.

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

Source: Monoclonal, Mouse

Dilution: wb 1:1000

Purification: The antibody was affinity-purified from mouse ascites by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

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

Observed Band: 70kD

Cell Pathway: Insulin_Receptor;Pathways in cancer;Prostate cancer;

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

characterized by a distinct forkhead domain. The specific function of this gene has not yet been determined; however, it may play a role in myogenic growth and differentiation. Translocation of this gene with PAX3 has been associated with

alveolar rhabdomyosarcoma. [provided by RefSeq, Jul 2008],

Function : disease:Chromosomal aberrations involving FOXO1 are a cause of rhabdomyosarcoma 2 (RMS2) [MIM:268220]; also known as alveolar

rhabdomyosarcoma. Translocation (2:13)(q35;q14) with PAX3; translocation

t(1;13)(p36;q14) with PAX7. The resulting protein is a transcriptional

activator., function: Transcription factor., PTM: Phosphorylated by AKT1; insulininduced (By similarity). IGF1 rapidly induces phosphorylation of Ser-256, Thr-24, and Ser-319. Phosphorylation of Ser-256 decreases DNA-binding activity and promotes the phosphorylation of Thr-24, and Ser-319, permitting phosphorylation of Ser-322 and Ser-325, probably by CK1, leading to nuclear exclusion and loss of function. Phosphorylation of Ser-329 is independent of IGF1 and leads to reduced function. Phosphorylated upon DNA damage, probably by ATM or

ATR.,similarity:Contains 1 fork-head DNA-binding domain.,subcellular

location:Shuttles betw

Subcellular Location:

Cytoplasm . Nucleus . Shuttles between the cytoplasm and nucleus. Largely nuclear in unstimulated cells (PubMed:11311120, PubMed:12228231,

PubMed:19221179, PubMed:21245099, PubMed:20543840,

PubMed:25009184). In osteoblasts, colocalizes with ATF4 and RUNX2 in the nucleus (By similarity). Serum deprivation increases localization to the nucleus, leading to activate expression of SOX9 and subsequent chondrogenesis (By similarity). Insulin-induced phosphorylation at Ser-256 by PKB/AKT1 leads, via stimulation of Thr-24 phosphorylation, to binding of 14-3-3 proteins and nuclear export to the cytoplasm where it is degraded by the ubiquitin-proteosomal pathway (PubMed:11237865, PubMed:12228231). Phosphorylation at Ser-249

by CDK1 disrupts binding of 14-3-3 proteins and promotes nuclear accumulation

Expression:	Ubiquitous.
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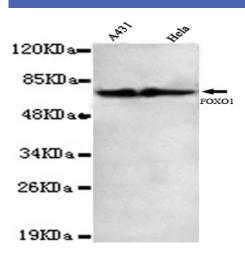
Sort : 6244

No4: 1

Mouse

Mostifications: Unmodified

Products Images



Western blot detection of FOXO1(C-terminus) in A431 and Hela cell lysates using FOXO1(C-terminus) mouse mAb (1:1000 diluted).Predicted band size:70KDa.Observed band size: 70KDa.