



FOXO1(C-term) mouse mAb

Catalog No	BYab-01081
Isotype	IgG
Reactivity	Human
Applications	WB
Gene Name	foxo1
Protein Name	
Immunogen	Purified recombinant human FOXO1(C-terminus) protein fragments expressed in E.coli.
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
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:1000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	FKH 1;FKH1;FKH1;FKHR;FKHR;Forkhead (Drosophila) homolog 1 (rhabdomyosarcoma);Forkhead (Drosophila) homolog 1 (rhabdomyosarcoma);Forkhead box O1;Forkhead box protein O1; Forkhead box protein O1A;Forkhead in rhabdomyosarcoma;Forkhead, Drosophila, homolog of, in rhabdomyosarcoma;FOXO1;FOXO1;FOXO1_HUMAN;FOXO1A;OTTHUMP0000018301.
Observed Band	70kD
Cell Pathway	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

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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

Tissue Specificity

Ubiquitous.

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; insulin-induced (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

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],

matters needing attention

Avoid repeated freezing and thawing!

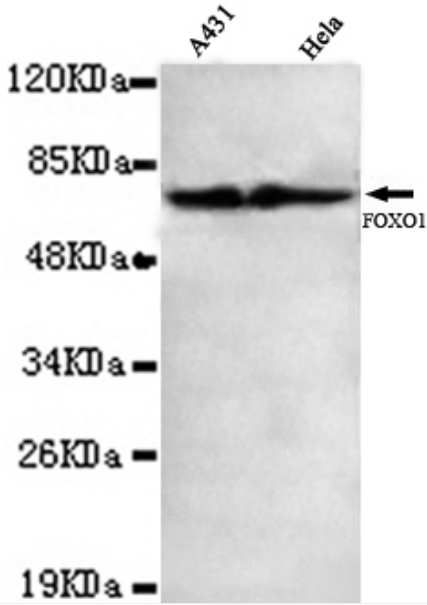
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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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.