



FOXO1(C-term) mouse mAb

Catalog No	YP-Ab-01081
Isotype	IgG
Reactivity	Human
Applications	WB
Gene Name	foxo1
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	FoxO1;FKH 1;FKH1;FKHR;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_HUMAN;FOXO1A;OTTHUMP00000018301.
Observed Band	70kD
Calculated Molecular Weight	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 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],

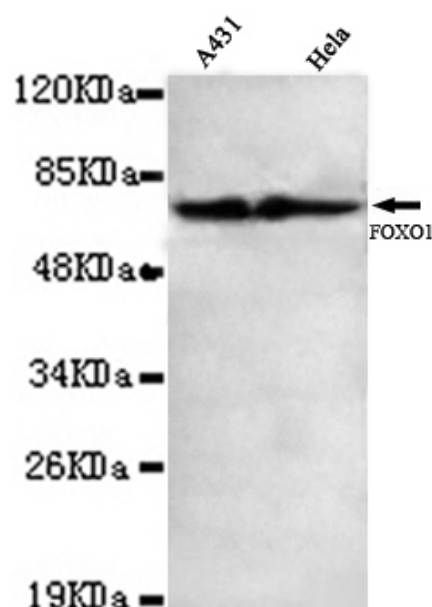
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

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

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.