

FoxO1A (Acetyl Lys248) rabbit pAb

Cat No.:ES20067

For research use only

Overview

Product Name	FoxO1A (Acetyl Lys248) rabbit pAb
Host species	Rabbit
Applications	WB; ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	WB 1:1000-2000 ELISA 1:5000-20000
Immunogen	Synthesized peptide derived from human FoxO1A (Acetyl Lys248)
Specificity	This antibody detects endogenous levels of Human,Mouse,Rat FoxO1A (Acetyl Lys248)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C . Avoid repeated freeze-thaw cycles.
Protein Name	FoxO1A (Acetyl Lys248)
Gene Name	FOXO1 FKHR FOXO1A
Cellular localization	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





Purification

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Clonality

Polyclonal

Concentration

1 mg/ml

Observed band

72kD

Human Gene ID

2308

Human Swiss-Prot Number

Q12778

Alternative Names

Forkhead box protein O1 (Forkhead box protein O1A;Forkhead in rhabdomyosarcoma)

Background

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 between cytoplasm and nucleus.,subunit:Interacts with LRPPRC.,tissue specificity:Ubiquitous.,

