



FoxO1 (phospho Ser319) rabbit pAb

Cat No.:ES1315

For research use only

Overview

Product Name	FoxO1 (phospho Ser319) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human FKHR around the phosphorylation site of Ser319. AA range:286-335
Specificity	Phospho-FoxO1 (S319) Polyclonal Antibody detects endogenous levels of FoxO1 protein only when phosphorylated at S319.
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	Forkhead box protein O1
Gene Name	FOXO1
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

82kD

Human Gene ID

2308

Human Swiss-Prot Number

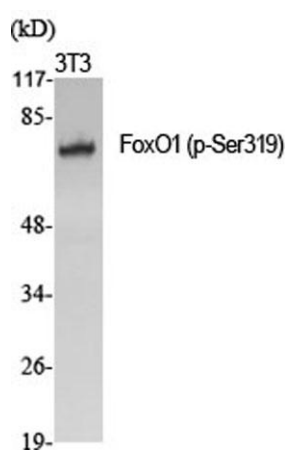
Q12778

Alternative Names

FOXO1; FKHR; FOXO1A; Forkhead box protein O1; Forkhead box protein O1A; Forkhead in rhabdomyosarcoma

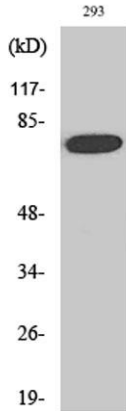
Background

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],

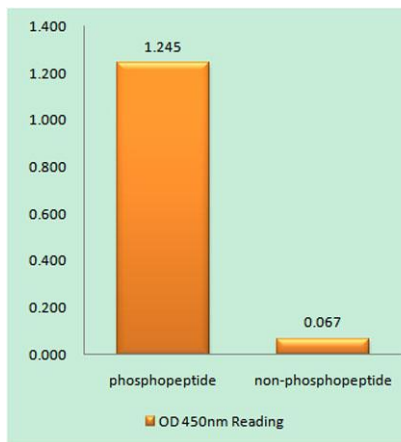


Western Blot analysis of various cells using Phospho-FoxO1 (S319) Polyclonal Antibody

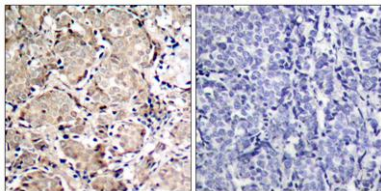




Western Blot analysis of 293 cells using Phospho-FoxO1 (S319) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using FKHR (Phospho-Ser319) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using FKHR (Phospho-Ser319) Antibody. The picture on the right is blocked with the phospho peptide.

