



FoxO1 (phospho Ser256) rabbit pAb

Cat No.:ES5300

For research use only

Overview

Product Name	FoxO1 (phospho Ser256) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat;Drosophila
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human FKHR around the phosphorylation site of Ser256. AA range:223-272
Specificity	Phospho-FoxO1 (S256) Polyclonal Antibody detects endogenous levels of FoxO1 protein only when phosphorylated at S256.
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





Purification

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

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

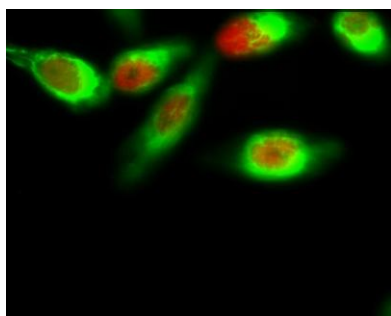
Q12778

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],

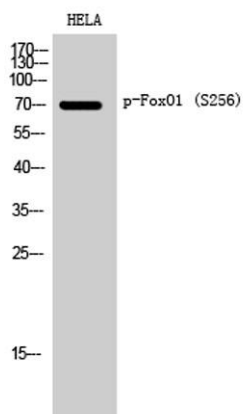


Immunofluorescence analysis of HeLa cell. 1, FoxO1 (phospho Ser256) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). Active Caspase-3 Monoclonal Antibody (5E1) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalo

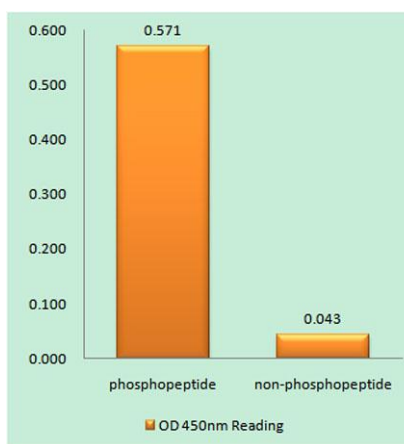




Western Blot analysis of HELA cells using Phospho-FoxO1 (S256) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using FKHR (Phospho-Ser256) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using FKHR (Phospho-Ser256) Antibody. The picture on the right is blocked with the phospho peptide.

