

**FoxO1 rabbit pAb****Cat#: orb768178 (Manual)**

For research use only. Not intended for diagnostic use.

<b>Product Name</b>	FoxO1 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	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.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human FKHR. AA range:223-272
<b>Specificity</b>	FoxO1 Polyclonal Antibody detects endogenous levels of FoxO1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Forkhead box protein O1
<b>Gene Name</b>	FOXO1
<b>Cellular localization</b>	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

78kD

#### Human Gene ID

2308

#### Human Swiss-Prot Number

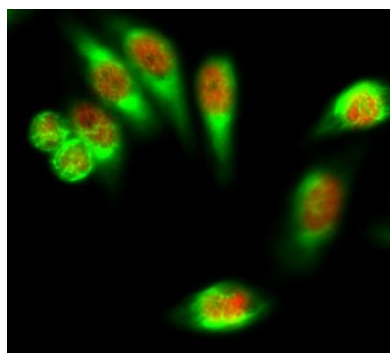
Q12778

#### Alternative Names

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

#### Background

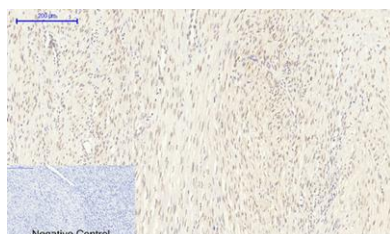
This gene belongs to the forkhead family of transcription factors which are characterized by a distinct forkhead domain. The specific function of this gene has not yet been determined; however, it may play a role in myogenic growth and differentiation. Translocation of this gene with PAX3 has been associated with alveolar rhabdomyosarcoma. [provided by RefSeq, Jul 2008],



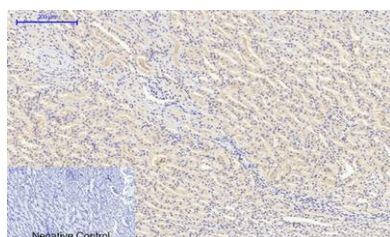
**Immunofluorescence analysis of HeLa cell. 1, FoxO1 Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). CK7 Monoclonal Antibody (12D7) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).**



**Immunohistochemical analysis of paraffin-embedded Human-uterus tissue.** 1, FoxO1 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.



**Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue.** 1, FoxO1 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.



**Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue.** 1, FoxO1 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.