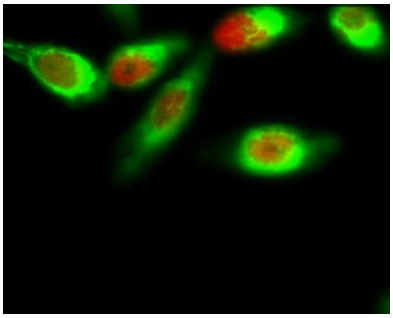
FoxO1 (phospho Ser256) rabbit pAb

Cat#: orb768175 (Manual)

For research use only. Not intended for diagnostic use.

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 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],



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 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).

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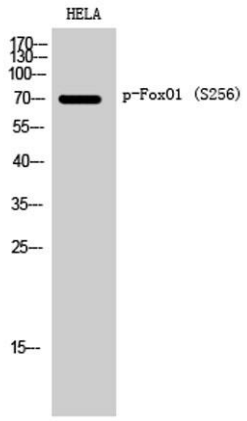
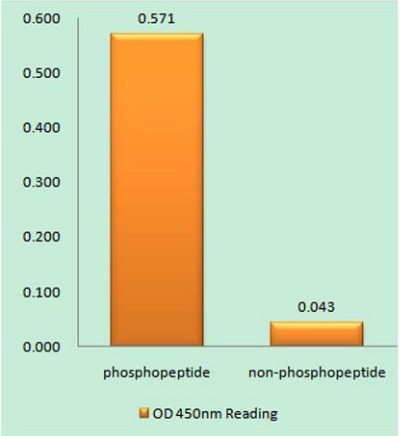
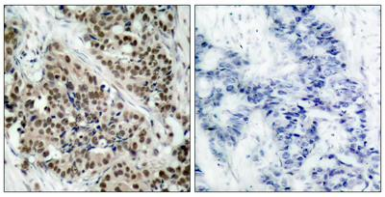


Western Blot analysis of HELA cells using Phospho-FoxO1 (S256) Polyclonal Antibody diluted at 1:1000



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.

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