

FoxO1/3 (phospho Ser322/S325) rabbit pAb**Cat#: orb768176 (Manual)**

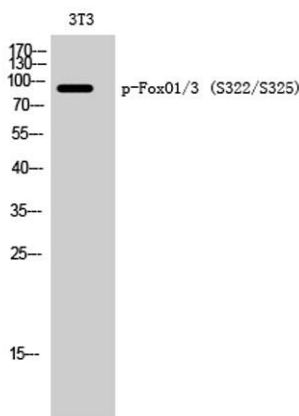
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Product Name	FoxO1/3 (phospho Ser322/S325) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human FOXO1A/3A around the phosphorylation site of Ser322 and Ser325. AA range:291-340
Specificity	Phospho-FoxO1/3 (S322/S325) Polyclonal Antibody detects endogenous levels of FoxO1/3 protein only when phosphorylated at S322/S325.
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 O1/3
Gene Name	FOXO1/FOXO3
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

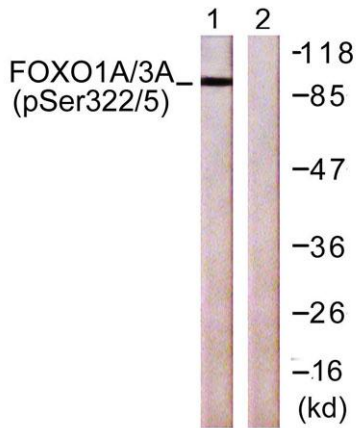
of 14-3-3 proteins and promotes nuclear accumulation

Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	97kD
Human Gene ID	2308
Human Swiss-Prot Number	Q12778/O43524
Alternative Names	FOXO1; FKHR; FOXO1A; Forkhead box protein O1; Forkhead box protein O1A; Forkhead in rhabdomyosarcoma; FOXO3; FKHL1; FOXO3A; Forkhead box protein O3; AF6q21 protein; Forkhead in rhabdomyosarcoma-like 1

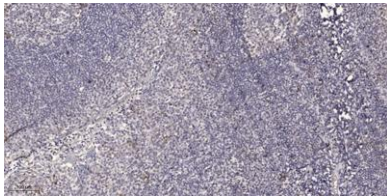
Background This gene belongs to the forkhead family of transcription factors which are characterized by a distinct forkhead domain. The specific function of this gene has not yet been determined; however, it may play a role in myogenic growth and differentiation. Translocation of this gene with PAX3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



Western Blot analysis of 3T3 cells using Phospho-FoxO1/3 (S322/S325) Polyclonal Antibody



Western blot analysis of lysates from NIH/3T3 cells treated with Wortmannin 40nM 24h, using FOXO1A/3A (Phospho-Ser322+Ser325) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).