

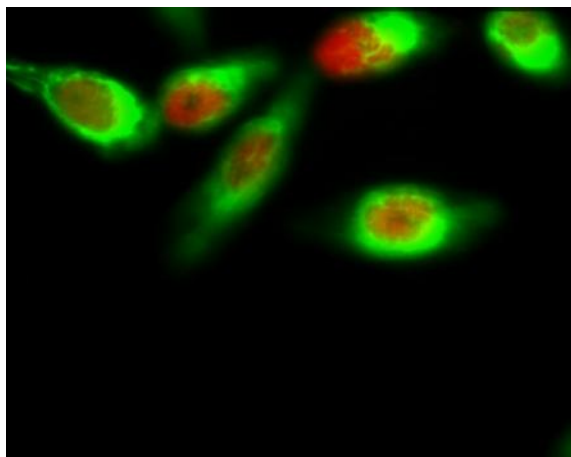
FoxO1 (phospho Ser256) Polyclonal Antibody

| | |
|------------------------------|---|
| Catalog No : | YP0113 |
| Reactivity : | Human;Mouse;Rat;Drosophila |
| Applications : | WB;IHC;IF;ELISA |
| Target : | FoxO1 |
| Fields : | >>FoxO signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Cellular senescence;>>Insulin signaling pathway;>>Thyroid hormone signaling pathway;>>Glucagon signaling pathway;>>Insulin resistance;>>AGE-RAGE signaling pathway in diabetic complications;>>Alcoholic liver disease;>>Shigellosis;>>Human papillomavirus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Prostate cancer |
| Gene Name : | FOXO1 |
| Protein Name : | Forkhead box protein O1 |
| Human Gene Id : | 2308 |
| Human Swiss Prot No : | Q12778 |
| Mouse Gene Id : | 56458 |
| Mouse Swiss Prot No : | Q9R1E0 |
| Rat Gene Id : | 84482 |
| Rat Swiss Prot No : | G3V7R4 |
| 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. Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |

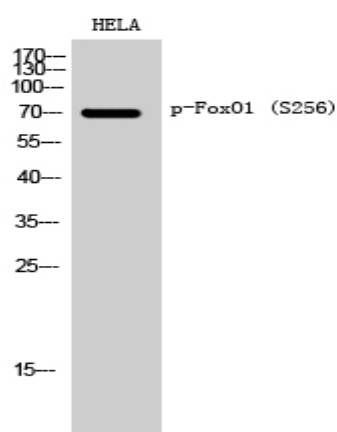
| | |
|-------------------------------|--|
| Formulation : | Polyclonal, Rabbit,IgG |
| Dilution : | WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications. |
| Purification : | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Concentration : | 1 mg/ml |
| Storage Stability : | -15°C to -25°C/1 year(Do not lower than -25°C) |
| Observed Band : | 82kD |
| Cell Pathway : | Insulin Receptor; B Cell Receptor; Protein_Acetylation |
| 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], |
| Function : | disease:Chromosomal aberrations involving FOXO1 are a cause of rhabdomyosarcoma 2 (RMS2) [MIM:268220]; also known as alveolar rhabdomyosarcoma. Translocation (2;13)(q35;q14) with PAX3; translocation t(1;13)(p36;q14) with PAX7. The resulting protein is a transcriptional activator.,function:Transcription factor.,PTM:Phosphorylated by AKT1; insulin-induced (By similarity). IGF1 rapidly induces phosphorylation of Ser-256, Thr-24, and Ser-319. Phosphorylation of Ser-256 decreases DNA-binding activity and promotes the phosphorylation of Thr-24, and Ser-319, permitting phosphorylation of Ser-322 and Ser-325, probably by CK1, leading to nuclear exclusion and loss of function. Phosphorylation of Ser-329 is independent of IGF1 and leads to reduced function. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Contains 1 fork-head DNA-binding domain.,subcellular location:Shuttles betw |
| Subcellular Location : | 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 |

Expression : Ubiquitous.

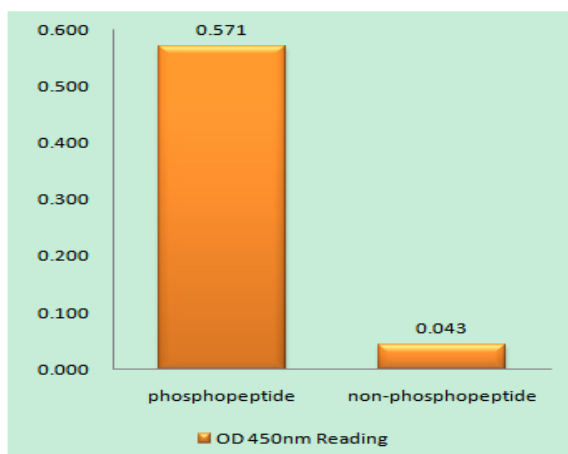
Products Images



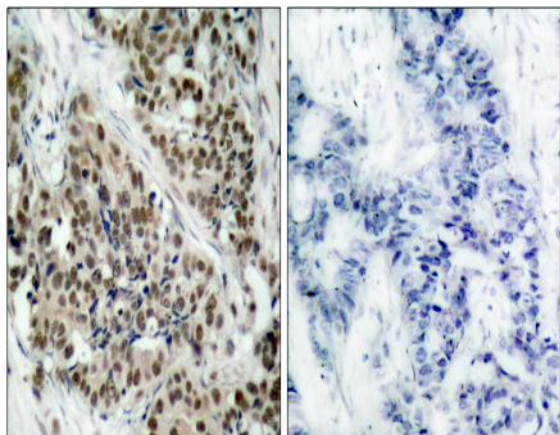
Immunofluorescence analysis of HeLa cell. 1, FoxO1 (phospho Ser256) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). Active Caspase-3 Monoclonal Antibody (5E1) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



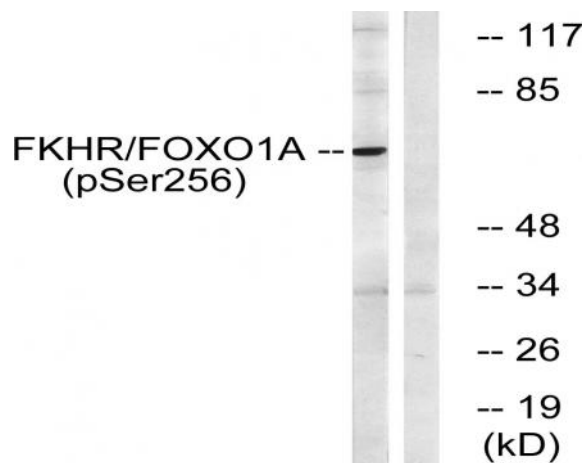
Western Blot analysis of HELA cells using Phospho-FoxO1 (S256) Polyclonal Antibody diluted at 1:1000



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.



Western blot analysis of lysates from HeLa cells treated with EGF+Serum, using FKHR (Phospho-Ser256) Antibody. The lane on the right is blocked with the phospho peptide.