

FKHR (Phospho Ser249) rabbit pAb

Catalog No: YP1671

Reactivity: Human; Mouse; Rat

Applications: WB

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 FKHR FOXO1A

Protein Name: FKHR (Phospho-Ser249)

Q12778

Q9R1E0

Human Gene Id: 2308

Human Swiss Prot

No:

Mouse Gene ld: 56458

Mouse Swiss Prot

No:

Rat Gene ld: 84482

Rat Swiss Prot No: G3V7R4

Immunogen: Synthesized peptide derived from human FKHR (Phospho-Ser249)

Specificity: This antibody detects endogenous levels of FKHR (Phospho-Ser249) at Human,

Mouse,Rat

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

1/3



Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000

Purification: The antibody was affinity-purified from rabbit serum by affinity-chromatography

using specific immunogen.

1 mg/ml Concentration:

-15°C to -25°C/1 year(Do not lower than -25°C) Storage Stability:

Molecularweight: 72kD

This gene belongs to the forkhead family of transcription factors which are **Background:**

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

rhabdomvosarcoma 2 (RMS2) [MIM:268220]; also known as alveolar

rhabdomyosarcoma. Translocation (2;13)(g35;g14) with PAX3; translocation

t(1;13)(p36;q14) with PAX7. The resulting protein is a transcriptional

activator., function: Transcription factor., PTM: Phosphorylated by AKT1; insulininduced (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,

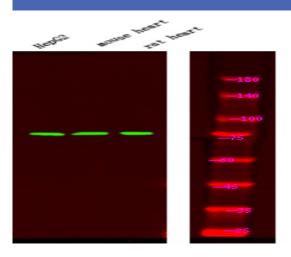
PubMed:19221179, PubMed:21245099, PubMed:20543840,

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



Western Blot analysis of HepG2 mouse brain tissue, rat brain tissue, using primary antibody at 1:1000 dilution 4°C, overnight. Secondary antibody(catalog#:RS23920) was diluted at 1:10000 25°C[]1.5hours