

35-1112: Polyclonal Antibody to FKHR (Phospho-Ser256)

Clonality :	Polyclonal
Application :	WB,IHC,IF
Reactivity :	Human,Mouse,Rat
Gene :	FOXO1
Gene ID :	2308
Uniprot ID :	Q12778
Format :	Purified
Alternative Name :	FKHR, FOXO1
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 256 (A-A-S(p)-M-D) derived from Human FKHR.

Description

Transcription factor that is the main target of insulin signaling and regulates metabolic homeostasis in response to oxidative stress. Binds to the insulin response element (IRE) with consensus sequence 5'-TT[G/A]TTTTG-3' and the related Daf-16 family binding element (DBE) with consensus sequence 5'-TT[G/A]TTTAC-3'. Activity suppressed by insulin. Main regulator of redox balance and osteoblast numbers and controls bone mass. Orchestrates the endocrine function of the skeleton in regulating glucose metabolism. Acts synergistically with ATF4 to suppress osteocalcin/BGLAP activity, increasing glucose levels and triggering glucose intolerance and insulin insensitivity. Also suppresses the transcriptional activity of RUNX2, an upstream activator of osteocalcin/BGLAP. In hepatocytes, promotes gluconeogenesis by acting together with PPARGC1A to activate the expression of genes such as IGFBP1, G6PC and PPCK1. Important regulator of cell death acting downstream of CDK1, PKB/AKT1 and SKT4/MST1. Promotes neural cell death. Mediates insulin action on adipose. Regulates the expression of adipogenic genes such as PPARG during preadipocyte differentiation and, adipocyte size and adipose tissue-specific gene expression in response to excessive calorie intake. Regulates the transcriptional activity of GADD45A and repair of nitric oxide-damaged DNA in beta-cells. Guo S., Rena G., Cichy S., He X., Cohen P., Unterman T.J. Biol. Chem. 274:17184-17192(1999)

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 78-82 kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100, Immunofluorescence: 1:100~1:200

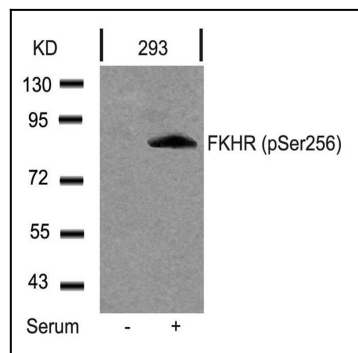


Figure 1: Western blot analysis of extracts from 293 cells untreated or treated with serum using FKHR(Phospho-Ser256) Antibody 35-1112 .

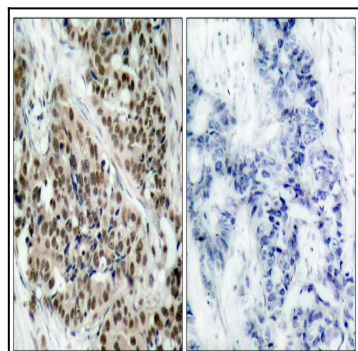


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using FKHR (Phospho-Ser256) Antibody 35-1112 (left) or the same antibody preincubated with blocking peptide 51115 (right).

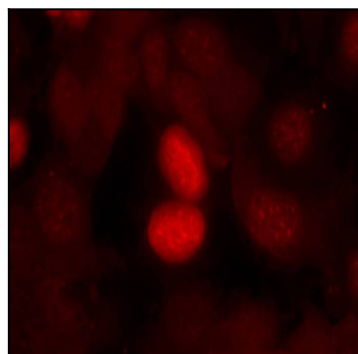


Figure 3: Immunofluorescence staining of methanol-fixed MCF7 cells using FKHR(Phospho-Ser256) Antibody 35-1112 .

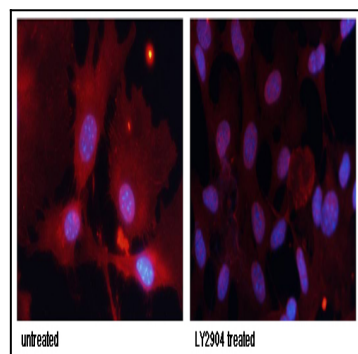


Figure 4: Immunofluorescence staining of methanol-fixed MEF cells untreated or treated with LY2904 using FKHR (Phospho-Ser256) Antibody 35-1112 .