

FKHR(Phospho-Ser256) Antibody

Catalog No: #11115



Package Size: #11115-1 50ul #11115-2 100ul #11115-4 25ul

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Description

Product Name	FKHR(Phospho-Ser256) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of FKHR only when phosphorylated at serine 256.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 256 (A-A-S(p)-M-D) derived from Human FKHR.
Target Name	FKHR
Modification	Phospho-Ser256
Other Names	FKHR; FOXO1;
Accession No.	Swiss-Prot: Q12778NCBI Protein: NP_002006.2
Concentration	1.0mg/ml
Formulation	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	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

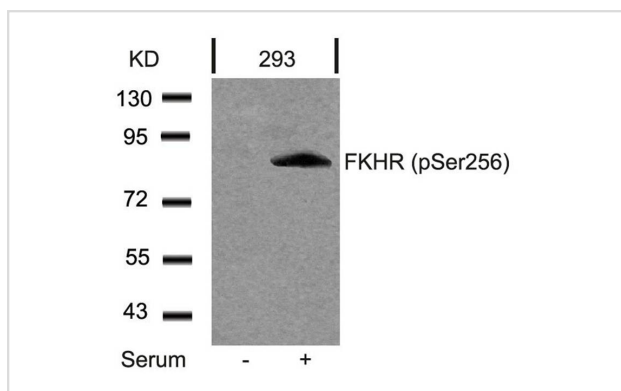
Predicted MW: 78-82 kd

Western blotting: 1:500~1:1000

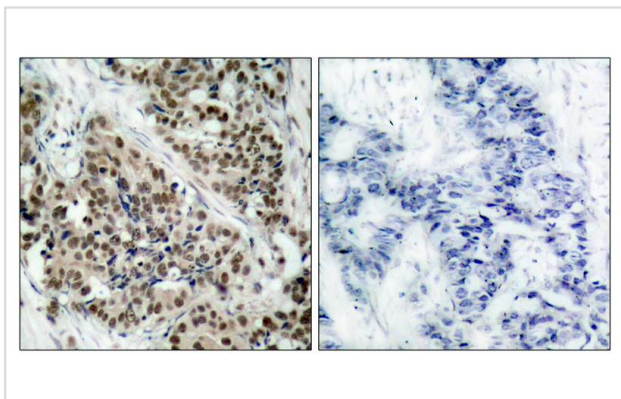
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

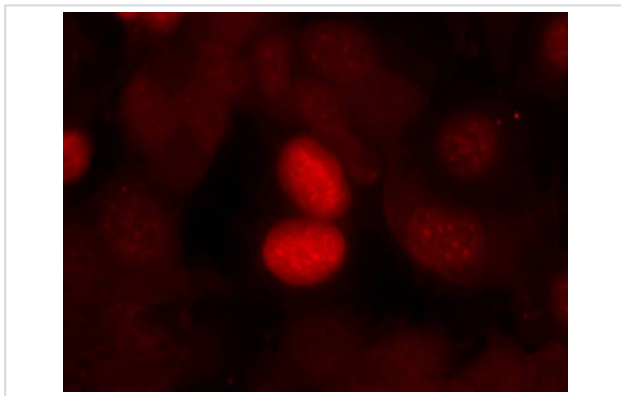
Images



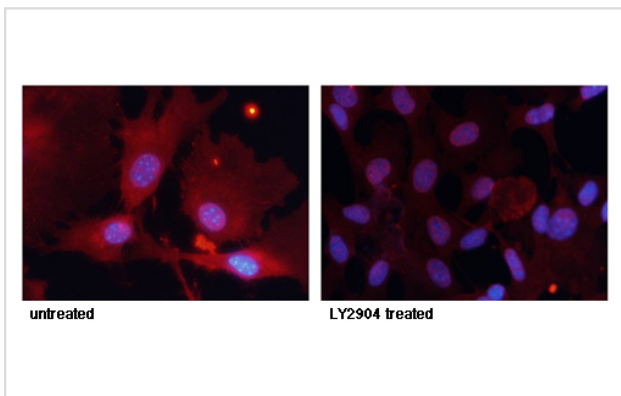
Western blot analysis of extracts from 293 cells untreated or treated with serum using FKHR(Phospho-Ser256) Antibody #11115.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using FKHR (Phospho-Ser256) Antibody #11115 (left) or the same antibody preincubated with blocking peptide #51115 (right).



Immunofluorescence staining of methanol-fixed MCF7 cells using FKHR(Phospho-Ser256) Antibody #11115.



Immunofluorescence staining of methanol-fixed MEF cells untreated or treated with LY2904 using FKHR (Phospho-Ser256) Antibody #11115.

Background

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)

Zhang X., Gan L., Pan H., Guo S., He X., Olson S.T., Mesecar A., Adam S., Unterman T.G.J. *Biol. Chem.* 277:45276-45284(2002)

Daitoku H., Hatta M., Matsuzaki H., Aratani S., Ohshima T., Miyagishi M., Nakajima T., Fukamizu A. *Proc. Natl. Acad. Sci. U.S.A.* 101:10042-10047(2004)

Published Papers

Zhan Lixuan, Tao Wang, Wen Li et al., Activation of AKT/FoxO signaling pathway contributes to induction of neuroprotection against transient global cerebral ischemia by hypoxic pre-conditioning in adult rats., Journal of Neurochemistry, 114(3):897-908(2010)

[PMID:20492357](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.