Datasheet for ABIN7138516

anti-FOXO1 antibody (pSer256)

4 Images

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Overview

Quantity:	100 µL
Target:	FOXO1
Binding Specificity:	pSer256
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Peptide sequence around phosphorylation site of serine 256 (A-A-S(p)-M-D) derived from Human FKHR.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
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 chromatogramphy usi

Target Details

Target:	FOXO1
Alternative Name:	FOXO1 (FOXO1 Products)
Background:	Background:

Target Details

	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 syngernistically 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) Aliases: FKH 1 antibody; FKH1 antibody; FKHR antibody; Forkhead (Drosophila) homolog 1 (rhabdomyosarcoma) antibody; Forkhead box O1 antibody; Forkhead box protein O1 antibody; Forkhead box protein O1A antibody; Forkhead in rhabdomyosarcoma antibody; Forkhead; Drosophila; homolog of; in rhabdomyosarcoma antibody; FoxO transcription factor antibody; foxo1 antibody; FOXO1_HUMAN antibody; FOXO1A antibody; OTTHUMP00000018301 antibody
UniProt:	Q12778
Pathways:	PI3K-Akt Signaling, Cell Division Cycle, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Carbohydrate Homeostasis, Chromatin Binding, Regulation of Carbohydrate Metabolic Process, CXCR4-mediated Signaling Events, BCR Signaling

Application Details

Application Notes:	WB:1:500-1:1000, IHC:1:50-1:100, IF:1:100-1:200,

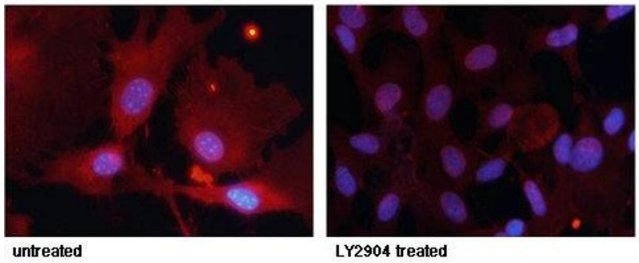
Application Details

Restrictions:	For Research Use only

Handling

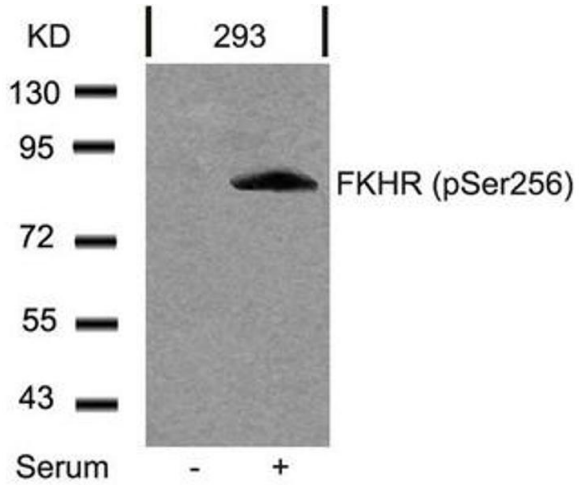
Format:	Liquid
Buffer:	Supplied at 1.0 mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

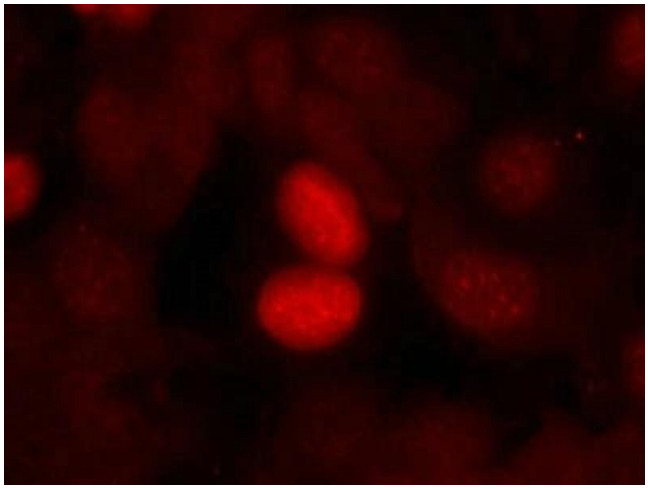
Image 1. Immunofluorescence staining of methanol-fixed MEF cells untreated or treated with LY2904 using FKHR (Phospho-Ser256) Antibody.



Western Blotting

Image 2. Western blot analysis of extracts from 293 cells untreated or treated with serum using FKHR(Phospho-Ser256) Antibody.

Images



Immunofluorescence

Image 3. Immunofluorescence staining of methanol-fixed MCF7 cells using FKHR(Phospho-Ser256) Antibody.

Please check the product details page for more images. Overall 4 images are available for ABIN7138516.