

# Datasheet for ABIN1420588

# anti-FOXO1 antibody (AA 165-270) (HRP)



### Overview

Overview	
Quantity:	100 μL
Target:	FOXO1
Binding Specificity:	AA 165-270
Reactivity:	Human, Mouse, Rat, Cow, Pig, Dog, Chicken
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This FOXO1 antibody is conjugated to HRP
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))
Product Details	
Immunogen:	KLH conjugated synthetic peptide derived from human FOXO1A
Isotype:	IgG
Cross-Reactivity:	Chicken, Cow, Dog, Human, Mouse, Pig, Rat
Purification:	Purified by Protein A.
Target Details	
Target:	FOXO1
Alternative Name:	FOXO1A (FOXO1 Products)
Background:	Synonyms: Forkhead box protein O1, Forkhead box protein O1A, Forkhead in rhabdomyosarcoma, FOXO1, FKHR, FOXO1A

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 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.

Molecular Weight: 72kDa

Gene ID: 2308

Pathways: PI3K-Akt Signaling, Cell Division Cycle, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling

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**

Restrictions:	For Research Use only
	IHC-P 1:200-400
Application Notes:	WB 1:300-5000

#### Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and
	50 % Glycerol.

### Handling

Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months