

Datasheet for ABIN7153081 anti-FOXO1 antibody (AA 1-300) (Biotin)



Overview

| Quantity: | 100 μg |
|----------------------|---|
| Target: | FOXO1 |
| Binding Specificity: | AA 1-300 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This FOXO1 antibody is conjugated to Biotin |
| Application: | ELISA |

Product Details

| lmmunogen: | Recombinant Human Forkhead box protein 01 protein (1-300AA) |
|-------------------|---|
| Isotype: | IgG |
| Cross-Reactivity: | Human |
| Purification: | >95%, Protein G purified |

Target Details

| Target: | F0X01 |
|-------------------|--|
| Alternative Name: | FOX01 (FOX01 Products) |
| Background: | 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 and CEBPA to activate the expression of genes such as IGFBP1, G6PC and PCK1. Important regulator of cell death acting downstream of CDK1, PKB/AKT1 and SKT4/MST1. Promotes neural cell death. Mediates insulin action on adipose tissue. 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. Required for the autophagic cell death induction in response to starvation or oxidative stress in a transcription-independent manner. 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: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300

Handling

| | Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4 |
|--------------------|---|
| 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,-80 °C |
| Storage Comment: | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |