

Product datasheet for **AP55699PU-N**

FOXO1 pThr24/32 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western blot: 1:500~1:1000.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide sequence around phosphorylation site of threonine 24/32(S-C-T(p)-W-P) derived from Human FOXO1/3/4-pan (KLH-conjugated)
Specificity:	The antibody detects endogenous levels of FOXO1/3/4-pan only when phosphorylated at threonine 24/32.
Formulation:	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Affinity chromatography using epitope-specific peptide
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	78 kDa
Gene Name:	forkhead box O1
Database Link:	Entrez Gene 2308 Human Q12778



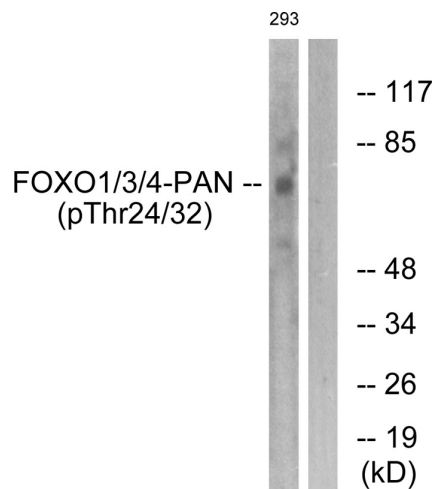
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Background:

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.

Synonyms:

FOXO1A, FOXO3A, FOXO4A

Product images:


Western blot analysis of extracts from 293 cells treated with Serum using FOXO1/3/4-pan (Phospho-Thr24/32) Antibody. The lane on the right is treated with the antigen-specific peptide.