

Product datasheet for TP527240

Foxo1 (NM_019739) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse forkhead box O1 (Foxo1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR227240 representing NM_019739 Red =Cloning site Green =Tags(s)
	<p>MAEAPQVVETDPDFEPLPRQRSCTWPLPRPEFNQSNSTTSSPAPSGGAAANPDAAASLASASAVSTDFMS NLSLLEESSEDFARAPGCVAVAAAAAASRGLCGDFQGPEAGCVHPAPPQPPPTGPLSQPPPVPSSAAAAAG PLAGQPRKTSSRRNAWGNLSYADLITKAISSAEKRLTLSQIYEWVMVKSVPYFKDKGDSNSSAGWKNSI RHNLSLHSKFIRVQNEGTGKSSWWMLNPEGGKSGKSPRRRAASMDNNSKFAKSRGRAAKKKASLQSGQEG PGDSPGSQFSKWPASPGSHSNDDFDNWSTFRPRTSSNASTISGRLSPIMTEQDDLGDGDVHSLVYPPSAA KMASTLPSLSEISNPENMENLLDNLNLLSSPTSLTVSTQSSPGSMMQQTPCYSFAPPNTSLNSPSPNYSK YTYGQSSMSPLPQMPMQTLQDSKSSYGGLNQYNCAPGLLKELLTSDSPPHNDIMSPVDPGVAQPNSRVLG QNVMMGPNVMPAYGSQASHNKMMNPSSHTHPGHAQQTASVNGRTLPHVNTMPHTSAMNRLTPVKTPLQ VPLSHPMQMSALGSYSSVSSCNGYGRMGVLHQELPSDLGDMFIERLDCMESIIRNDLMDGDTLDFNFD NVLPNQSFPHSVKTTTHSWVSG</p> <p>SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV</p>
Tag:	C-MYC/DDK
Predicted MW:	70 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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RefSeq: [NP_062713](#)

Locus ID: 56458

UniProt ID: [Q9R1E0](#)

RefSeq Size: 5552

Cytogenetics: 3 23.19 cM

RefSeq ORF: 1956

Synonyms: Afxh; AI876417; FKHR; Fkhr1; Foxo1a

Summary: 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 IGF1, G6PC and PCK1. Important regulator of cell death acting downstream of CDK1, PKB/AKT1 and STK4/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. Mediates the function of MLIP in cardiomyocytes hypertrophy and cardiac remodeling (By similarity).
[UniProtKB/Swiss-Prot Function]