

Product datasheet for **MR226631L4V**

Foxo3 (NM_019740) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Foxo3 (NM_019740) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Foxo3
Synonyms:	1110048B16Rik; 2010203A17Rik; C76856; Fkhr2; FKHRL1; Foxo3a
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_019740
ORF Size:	2016 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR226631).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_019740.2
RefSeq Size:	2889 bp
RefSeq ORF:	2019 bp
Locus ID:	56484
UniProt ID:	Q9WVH4
Cytogenetics:	10 22.79 cM



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Gene Summary:

Transcriptional activator that recognizes and binds to the DNA sequence 5'-[AG]TAAA[TC]A-3' and regulates different processes, such as apoptosis and autophagy (PubMed:18054316, PubMed:18054315, PubMed:23805378). Acts as a positive regulator of autophagy in skeletal muscle: in starved cells, enters the nucleus following dephosphorylation and binds the promoters of autophagy genes, such as GABARAP1L, MAP1LC3B and ATG12, thereby activating their expression, resulting in proteolysis of skeletal muscle proteins (PubMed:18054316, PubMed:18054315, PubMed:25402684). Triggers apoptosis in the absence of survival factors, including neuronal cell death upon oxidative stress (By similarity). Participates in post-transcriptional regulation of MYC: following phosphorylation by MAPKAPK5, promotes induction of miR-34b and miR-34c expression, 2 post-transcriptional regulators of MYC that bind to the 3' UTR of MYC transcript and prevent its translation (By similarity). In response to metabolic stress, translocates into the mitochondria where it promotes mtDNA transcription (PubMed:23283301).[UniProtKB/Swiss-Prot Function]