

Product datasheet for MR204603L4V

OriGene Technologies, Inc.

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Zfp36 (NM_011756) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Zfp36 (NM_011756) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Zfp36

Synonyms: Gos24; Nup475; Tis11; TIS11D; TISII; Ttp; Zfp-36

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_011756

ORF Size: 960 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(MR204603).

Sequence:

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.

RefSeg: NM 011756.4, NP 035886.1

RefSeq Size: 1765 bp
RefSeq ORF: 960 bp
Locus ID: 22695
UniProt ID: P22893

Cytogenetics: 7 16.72 cM





Gene Summary:

Zinc-finger RNA-binding protein that destabilizes numerous cytoplasmic AU-rich element (ARE)-containing mRNA transcripts by promoting their poly(A) tail removal or deadenylation, and hence provide a mechanism for attenuating protein synthesis (PubMed:10330172, PubMed:10706852, PubMed:10805719, PubMed:15014438, PubMed:15187092, PubMed:15634918, PubMed:17030620, PubMed:19188452, PubMed:20595389, PubMed:21078877, PubMed:22701344, PubMed:27193233). Acts as an 3'-untranslated region (UTR) ARE mRNA-binding adapter protein to communicate signaling events to the mRNA decay machinery (PubMed:21278420). Recruits deadenylase CNOT7 (and probably the CCR4-NOT complex) via association with CNOT1, and hence promotes ARE-mediated mRNA deadenylation (PubMed:21278420). Functions also by recruiting components of the cytoplasmic RNA decay machinery to the bound ARE-containing mRNAs (PubMed:21278420). Self regulates by destabilizing its own mRNA (PubMed:15187092, PubMed:17288565). Binds to 3' UTR ARE of numerous mRNAs and of its own mRNA (PubMed:11533235, PubMed:15187092, PubMed:16508014, PubMed:17288565, PubMed:17971298, PubMed:20595389, PubMed:21078877, PubMed:21278420, PubMed:22701344, PubMed:27193233). Plays a role in anti-inflammatory responses; suppresses tumor necrosis factor (TNF)-alpha production by stimulating ARE-mediated TNF-alpha mRNA decay and several other inflammatory ARE-containing mRNAs in interferon (IFN)- and/or lipopolysaccharide (LPS)-induced macrophages (PubMed:8630730, PubMed:9703499, PubMed:15014438, PubMed:16514065). Plays also a role in the regulation of dendritic cell maturation at the post-transcriptional level, and hence operates as part of a negative feedback loop to limit the inflammatory response (By similarity). Promotes ARE-mediated mRNA decay of hypoxia-inducible factor HIF1A mRNA during the response of endothelial cells to hypoxia (By similarity). Positively regulates early adipogenesis of preadipocytes by promoting ARE-mediated mRNA decay of immediate early genes (IEGs) (PubMed:22701344). Negatively regulates hematopoietic/erythroid cell differentiation by promoting ARE-mediated mRNA decay of the transcription factor STAT5B mRNA (By similarity). Plays a role in maintaining skeletal muscle satellite cell quiescence by promoting ARE-mediated mRNA decay of the myogenic determination factor MYOD1 mRNA (PubMed:25815583). Associates also with and regulates the expression of non-ARE-containing target mRNAs at the posttranscriptional level, such as MHC class I mRNAs (By similarity). Participates in association with argonaute RISC catalytic components in the ARE-mediated mRNA decay mechanism; assists microRNA (miRNA) targeting ARE-containing mRNAs (By similarity). May also play a role in the regulation of cytoplasmic mRNA decapping; enhances decapping of AREcontaining RNAs, in vitro (By similarity). Involved in the delivery of target ARE-mRNAs to processing bodies (PBs) (By similarity). In addition to its cytosolic mRNA-decay function, affects nuclear pre-mRNA processing (PubMed:22844456). Negatively regulates nuclear poly(A)-binding protein PABPN1-stimulated polyadenylation activity on ARE-containing premRNA during LPS-stimulated macrophages (PubMed:22844456). Also involved in the regulation of stress granule (SG) and P-body (PB) formation and fusion (PubMed:15967811). Plays a role in the regulation of keratinocyte proliferation, differentiation and apoptosis (By similarity). Plays a role as a tumor suppressor by inhibiting cell proliferation in breast cancer cells (By similarity).[UniProtKB/Swiss-Prot Function]