

Product datasheet for MR204603

Zfp36 (NM_011756) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Zfp36 (NM_011756) Mouse Tagged ORF Clone

Tag: Myc-DDK

Symbol: Zfp36

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

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>MR204603 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com **Protein Sequence:** >MR204603 protein sequence

Red=Cloning site Green=Tags(s)

MDLSAIYESLQSMSHDLSSDHGGTESLGGLWNINSDSIPSGVTSRLTGRSTSLVEGRSCGWVPPPPGFAP LAPRPGPELSPSPTSPTATPTTSSRYKTELCRTYSESGRCRYGAKCQFAHGLGELRQANRHPKYKTELCH KFYLQGRCPYGSRCHFIHNPTEDLALPGQPHVLRQSISFSGLPSGRRSSPPPPGFSGPSLSSCSFSPSSS PPPPGDLPLSPSAFSAAPGTPVTRRDPNQACCPSCRRSTTPSTIWGPLGGLARSPSAHSLGSDPDDYASS GSSLGGSDSPVFEAGVFGPPQTPAPPRRLPIFNRISVSE

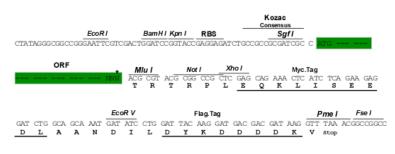
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_011756

ORF Size: 960 bp

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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).





Reconstitution Method:

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>NM 011756.4, NP 035886.1</u>

RefSeq Size: 1765 bp

 RefSeq ORF:
 960 bp

 Locus ID:
 22695

 UniProt ID:
 P22893

 Cytogenetics:
 7 16.72 cM

 MW:
 33.6 kDa

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

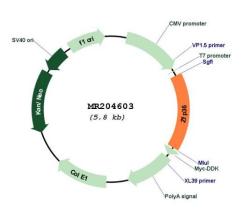
lipopolysaccharide (LPS)-induced macrophages (PubMed:8630730, PubMed:9703499, PubMed:15014438, PubMed:16514065). Plays also a role in the regulation of dendritic cell maturation at the post-transcriptional level, and hence operates as part of a negative feedback loop to limit the inflammatory response (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 ARE-containing 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 pre-mRNA during LPSstimulated 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]

Product images:



Circular map for MR204603