

Product datasheet for MR216038L3

Tnpo1 (NM_178716) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Tnpo1 (NM_178716) Mouse Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: Tnpo1

Synonyms: AU021749; D13Ertd688e; IPO2; Kpnb2; MIP; MIP1; TRN

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(MR216038).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_178716

ORF Size: 2694 bp



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Tnpo1 (NM_178716) Mouse Tagged Lenti ORF Clone - MR216038L3

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 178716.3</u>, <u>NP 848831.2</u>

 RefSeq Size:
 5391 bp

 RefSeq ORF:
 2697 bp

 Locus ID:
 238799

 UniProt ID:
 Q8BFY9

Cytogenetics: 13 52.24 cM

Gene Summary: Functions in nuclear protein import as nuclear transport receptor. Serves as receptor for

nuclear localization signals (NLS) in cargo substrates (PubMed:11493596). Is thought to mediate docking of the importin/substrate complex to the nuclear pore complex (NPC) through binding to nucleoporin and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to the importin, the importin/substrate complex dissociates and importin is re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus (By similarity). Involved in nuclear import of M9-containing proteins. In vitro, binds directly to the M9 region of the heterogeneous nuclear ribonucleoproteins (hnRNP), A1 and A2 and mediates their nuclear import. Appears also to be involved in hnRNP A1/A2 nuclear export. Mediates the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5. Binds to a beta-like import receptor binding (BIB) domain of RPL23A (By similarity). In vitro, mediates nuclear import of

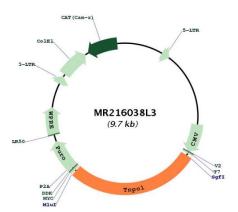
SRP19 (By similarity). Mediates the import of histones H2A, H2B, H3 and H4

(PubMed:11493596). Mediates nuclear import of ADAR/ADAR1 in a RanGTP-dependent

manner (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR216038L3