

Product datasheet for **MC202073**

Tnpo1 (NM_001048267) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tnpo1 (NM_001048267) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tnpo1
Synonyms:	AU021749; D13Ertd688e; IPO2; Kpnb2; MIP; MIP1; TRN
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

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>BC055372 sequence for NM_001048267
AAGAGGTAATCCGGAGCGGTCCGGCCGGGTTTCGGCAAACCAAGATGGAGTATGAGTGGAAACCTGACGA
GCAAGGGCTTCAGCAGATCCTGCAGTCTCAAGGAGTCCCAGTCCCCAGACACCACCATCCAGAGGACC
GTGCAACAAAACTGGAACAACCAATCAATATCCAGATTTTAACTACTTGTATTTTGTCTTACAA
AATTAATCTGAAGATGAGCCACACGGTCATTGAGCGGTCTGATCTTGAAGAACAATGTGAAAGCTCA
TTTTCAGAACTTCCAAATGGTGTGACAGACTTCATCAAGAGTGAATGTCTAAATAACATTGGGGACTCC
TCTCCGTTGATCAGAGCCACTGTCGGTATTTAATTACAACCATAGCCTCCAAGGGAGAGCTGCAGAATT
GGCCTGATCTCTTACCAAACCTGTAGCCTGCTGGATTCCGAGGACTACAACACTTGTGAGGGAGCCTT
CGGTGCCCTTCAGAAGATATGTGAGGACTCTGCAGAGATTTTAGACAGTATGTCTTAGATCGCCCTCTC
AACATCATGATCCCCAAGTTTTTACAGTTTTTCAAGCACAGCAGTCCCAAATAAGGTCTCATGCTGTTG
CATGTGTCAATCAGTTCATCATCAGTCGGACCCAGGCGCTCATGCTGCACATCGATTCTTCATTGAGAA
CCTCTTTGCACTGGCTGGCGACGAGGAAGCAGAGGTGCGGAAGAAGCTGTGCCGGGCGCTTGTGATGTTG
CTTGAAGTCCGGATGGATCGCTGCTTCTCATATGCACAACATAGTCGAGTACATGCTGCAGAGAACCC
AAGACCAAGATGAGAATGTAGCTCTGGAGGCTGTGAATCTGGCTGACTTTGGTGAACAGCCAATATG
CAAAGATGTAAGGCATCTACCAAAGTTGATTCTGTGTTAGTGAATGGCATGAAGTACTCAGAT
ATAGATATTATCCTGCTTAAAGGGTATGTTGAGGAAGATGAGACCATCCCGGATAGTGAGCAGGATATAC
GGCCGCGGTTTTCATCGCTCGAGGACAGTGGCTCAGCAGCATGAGGAGGATGGGATTGAGGAGGAAGACGA
TGATGATGACGAAATGATGATGATGACACGATTTCTGACTGGAACCTGAGAAAGTGTCTGCTGCTGCT
CTCGATGTTCTCGCAAATGTTTATCGTGATGAGCTTTTGGCCGACATTCTGCCACTTTTGAAGAATTGC
TTTTCCATCATGAATGGTTGTGAAAGAATCTGGCATCTTGGTTTTAGGAGCAATTGCTGAAGGTTGAT
GCAAGGCATGATCCGTACCTGCCGAGCTCATTCTCACCTTATTCAGTGCCTTTCTGATAAAAAGGCT
CTTGTGCGTTCATCACCTGCTGGACTCTTAGCCGCTATGCACACTGGGTAGTCAGCCAGCCACCAGATA
CGTACCTGAAGCCATTAATGACAGAACCTGTAAGCGTATCCTCGATAGCAACAAGAGAGTACAGGAAGC
AGCTTGCAGTGCCTTCGCTACATTAGAAGAGGAGGCTGTACAGAGCTCGTCCCTTACCTTGCTTATATA
CTCGATACCCTCGTCTTTCGCTTTCAGTAAATACCAGCATAAGAACCTGCTCATTCTGTACGACGCCATAG
GGACACTGGCAGATTCAGTGGGACATCATTTAAACAAGCCAGAATATATTCAGATGCTAATGCCTCCTTT
GATCCAGAAATGGAACATGCTGAAGGATGAAGACAAGGATCTTTTCCCTTTGCTTGAGTGTCTCTCGTCT
GTTGCCACAGCCTTGCAGTCTGGCTTCTTCCATATTGTGAACCTGTATATCAGCGTTGCGTAAACCTAG
TTCAGAAGACTCTGGCACAAGCCATGCTAAACAATGCTCAACCAGAACAGTATGAAGCTCCAGATAAAGA
TTTTATGATTGTGGCTCTTGACTTACTCAGCGGCTGGCTGAGGGCTGGGAGGCAACATTGAGCAGCTG
GTGGCCCGCAGTAACATCCTGACGCTGATGTACCAGTGCATGCAGGATAAAATGCCCGAGGTTCCGCGAGA
GTTCTTTTGCATTGCTAGGTGACCTGACTAAAGCGTGCTTCCAGCATGTTAAGCCTTGTATAGCTGATTT
CATGCCAATATTGGGAACCAATCTAAATCCAGAGTTTATTTTCAGTCTGCAACAATGCCACCTGGGCGATT
GGGGAAATATCAATCAAATGGGTATAGAGATGCAGCCCTACATCCCTATGGTGTGACACAGCTTGTGG
AGATCATTAAACAGACCCAACACCCCAAAGACGCTGTTGGAGAACACAGCAATAACAATGGTTCGTCTTGG
TTACGTTTGTCTCAAGAGGTGGCCCCATGCTACAGCAGTTTATAAGACCCTGGTGTACCTCTCTGAGA
AACATAAGAGACAATGAAGAAAAAGATTTCAGCATTCCGTGGGATTTGTACCATGATCAGTGTGAATCCCA
GTGGCGTAATCCAAGATTTTATATTTTTTGTGATGCTGTTGCATCATGGATTAACCCAAAAGATGATCT
CAGAGACATGTTCTGTAAGATCCTTTCATGGATTTAAAAACCAAGTTGGGGATGAAAATGGAGCGGATTC
TCTGACCAGTTTTCTTCCCTTAAAAGAGCGTCTTGCAGCTTTTATGGTGTAAATCTAATACACTTA
AGCTGCAGTCCCAAACTAGGGTCCGTGAGTCTTGGAGACTATGGGAGCCTCTGCACCCAGGAAAATG
TTACCCTTTACAGGGGGGAAAGGTAACCAGTAGGGAATACAGTACGATCCCAACCTACTGGGAGGGG
GGGAGGGAGGTGTTGCCGTCAGTACTAAGTCGATGTTGGGAAATGTTTTAACATCTGGAGCCTTTGTG
GGTGGAAATCTGCTCCAATTACAACCTGCACTGGATGTGAAGAAGCAAAAACCTTCCGCTACTCAC
AGAACAGTACTTTCTGGAATATTATGGGGATTGTACCAAAAACAAGAACCCTTAAACAATGCCTAGGGA
ATGATAAGGAGGAGGAAAATCCCAGGTCCACAGCAAAGGACACCTAAGAGTGGGAGGCTGCAGCAGTAAG
GTGGCTTTTTATCAAAGTTTTTATATAAATTTCCACGTTACGGGGCTTGTTTTGCATGCTGATGAAG
AACTACTTAAAACCTAACAGTTAAAATCAGCTTGCCTCCCTAGTGAAGCAGGTTCTTGGAAATTACAAT
TTAAGGTACCCCAAAAAGTTGGAATAAAAGGAAACAAATTTGAACAACGAAAAAA
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Restriction Sites:

RsrII-NotI

ACCN:	NM_001048267
Insert Size:	2673 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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:	BC055372 , AAH55372
RefSeq Size:	3347 bp
RefSeq ORF:	2673 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]

Transcript Variant: This variant (2) contains a distinct 5' UTR and uses a downstream start codon, compared to variant 1. Isoform 2 has a shorter N-terminus, compared to isoform 1.