

Product datasheet for **MR211064**

Tnpo2 (BC003275) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tnpo2 (BC003275) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tnpo2
Synonyms:	TRN2, MGC6380, Kpnb2b, IPO3, Knpb2b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR211064 representing BC003275
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**

ATGGACTGGCAGCCAGACGAGCAGGGCCTGCAGCAGGTCTTGACGCTTCTCAAAGACTCGCAGTCGCCCCA
 ACACAGCTACTCAGCGCATTGTGCAGGATAAACTTAAACAACCAACCAGTTTCCTGACTTTAAACAATA
 CCTGATCTTTGTCTGACCAGACTCAAATCAGAAGATGAGCCAACCCGCTCTCTGAGTGGCCTCATCCTC
 AAGAACAATGTGAAGGCGCATTACCAGAGCTTCCCGCCTCTGTGGCTGACTTCATCAAACAGGAGTGTC
 TCAACAACATTGGCGATGCCTCTCTCATCAGAGCCACCATCGGCATTCTCATCACCACCATCGCTTC
 CAAGGGTGAGCTGCAGATGTGGCCAGAGCTGCTGCCTCAGCTGTGCAACCTGCTCAACTCAGAGGATTAT
 AATACCTGTGAGGGAGCCTTTGGAGCCCTACAGAAGATCTGTGAAGACTCCTCGGAGCTTTTGGATAGTG
 ATGCTCTCAACAGGCCCTCAACATCATGATCCCTAAATTCCTGCAGTTTTTCAAGCACTGCAGCCCTAA
 GATCCGGTCCCAGCCATCGCCTGTGTGAACAGTTTCATCATGGACCGGGCCCAAGCGCTGATGGACAAC
 ATTGACACTTTTATTGAGCACCTGTTTGGCTTGGCTGTGGATGATGACCTGAGGTGAGAAAGAAGCTGT
 GCCGGGCCCTTGTGATGCTTTTGAAGTGCAATTGACAGGCTCATCCCTCACATGCACAGCATCATCCA
 GTACATGCTGCAGAGGCCAGGACCATGATGAGAACGTGGCCCTGGAGGCCTGTGAGTTCTGGCTGACG
 CTAGCCGAGCAGCCCATCTGCAAGGAAGTCTGGCCTCTCATCTGGTCCAGTTGATCCCTATCCTCGTGA
 ATGGGATGAAGTACTCTGAAATTGACATCATCCTTCTTAAGGGGGATGTGGAGGAGGACGAGGCGGTACC
 TGACAGTGAGCAGGACATCAAGCCCCGTTCCACAAGTCACGCACAGTGACATTGACTCACGAGGCTGAG
 CGGCCTGATAGCTCTGAGGATGCTGAGGACGACGATGATGACGACGCTTTGTGCGACTGGAATCTGAGGA
 AGTGCTCTGCAGCTGCGCTGGATGTCTTGCCAATGTCTTCCGGGAGAACTGTTGCCCACTACTTCC
 CTTGCTCAAGGGCCTCCTATTCCACCCTGAGTGGGTGGTCAAAGAGTCAGGGATCCTGGTCTGGGCGCC
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 TGTGAGATAAGAAGGCTTAGTACGCTCCATTGCTGCTGGACGCTGAGCCGCTATGCCCACTGGGTAGT
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 CCTACCTCAGCTATATCCTTGACACTCTCGTTTTTGCCTTTGGCAATACCAGCATAAGAAGCTGCTCAT
 CCTCTATGATGCCATTGGCACCTGGCCGACTCTGTGGGCCACCCTCAATCAGCCGAGTACATTGAG
 AAGCTGATGCCTCCACTGATCCAGAAGTGAATGAGCTCAAGGACGAAGACAAGGACCTCTTCCGCTGC
 TGGAGTGCTATCATCTGTGGCCACTGCCCTGCAGAGTGGCTTCTGCCCTACTGCGAGCCTGTCTACCA
 GCGCTGTGTTACCTGGTACAGAAGACTGGCCAGGCCATGATGTATACACAACACCCGAACAATAT
 GAGGCCCCAGACAAGACTTCATGATTGTTGCATTGGACCTGCTTAGTGGCTTGGCTGAGGGCCTAGGTG
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 GCCTGAGGTCCGGCAGAGCTCCTTTGCCCTTCTGGGAGACCTACCAAAGCCTGCTTTATCCACGTCAAG
 CCCTGTATCGCTGAGTTCATGCCTATTCTGGGTACCAACCTGAACCCTGAGTTCATCTGTCTGCAACA
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 GGTGCACGTCCCTTAGGAACATCCGGGACAACGAGGAGAAGGATTCTGCCTTCCGAGGCATCTGCATGAT
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 AGAACTGGCAACAGTTCTCAGAGCAGTCCACCTCTGCTCAAGGAGAGGCTGGCAGCCTCTATGGGGT
 C

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR211064 representing BC003275
 Red=Cloning site Green=Tags(s)

MDWQPDEQGLQQVLQLLKDSQSPNTATQRIVQDKLKQLNQFPDFNNYLIFVLTRLKSEDEPTRSLSGILIL
 KNNVKAHYQSFPFPPVADFIKQECLNNIGDASSLIRATIGILITTIASKGELQMWPELLPQLCNLLNSEDY
 NTCEGAFGALQKICEDSSELLSDALNRPLNIMIPKFLQFFKHCSPIKIRSHAIACVNQFIMDRAQALMDN
 IDTFIEHLFALAVDDDDPEVRKNVCRALVMLLEVRIDRLIPMHHSIIQYMLQRTQDHDENVALEACEFWLT
 LAEQPICKEVLASHLVQLIPILVNGMKYSEIDIILLKGDVEEDEAVPDSEQDIKPRFHKSRVTTLTHEAE
 RPDSSDAEDDDDDALSDWNLKCSAAALDVLANVFREELLPHLLPLLKGLLFHPEWVVKESGILVLGA
 IAEGCMQGMVPYLPPELIPHLIQCLSDKKALVRSIACWTLTRYAHWVVSQPPDMHLKPLMTELLKRILDGN
 KRVQEAACSAFATLEEEACTELVPYLSYILDTLVFAFGKYQHKNLLILYDAIGTLADSVGHHLNQPEYIQ
 KLMPPLIQKWNELKDEKDLFPLLECLSSVATALQSGFLPYCEPVYQRCVTLVQKTLAQAMMYTQHPEQY
 EAPDKDFMIVALDLLSGLAEGLGHHVEQLVARSNIMTLLFQCMQDSMPEVRQSSFALLGDLTKACFIHVK
 PCIAEFMPILGTNLNPEFISVCNNATWAIGEICMQMGAEMQPYVQMVNLNLVEIINRPNTPKTLLNTAI
 TIGRLGVYCPQEVAPMLQQFIRPWCTSLRNIRDNEEKDSAFRGICMMIGVNPGGVVQDFIFFCDAVASWV
 SPKDDLDMFYKILHGFKDQVGEENWQQFSEQFPPLLKERLAIFYGV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9038_b05.zip

Restriction Sites: SgfI-MluI

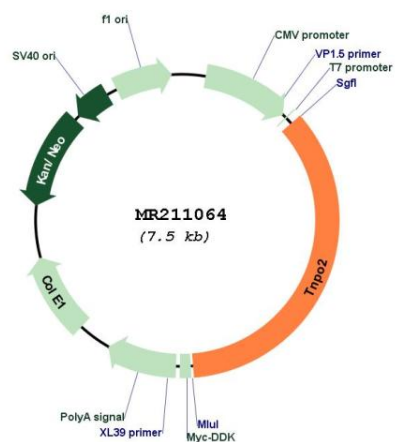
Cloning Scheme:



ACCN: BC003275

ORF Size:	2661 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	BC003275.1
RefSeq Size:	2897 bp
RefSeq ORF:	2663 bp
Locus ID:	212999
Cytogenetics:	8 C3
MW:	106.2 kDa
Gene Summary:	Probably functions in nuclear protein import as nuclear transport receptor. Serves as receptor for nuclear localization signals (NLS) in cargo substrates. 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). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211064