Product datasheet for MR225623

Tardbp (NM_001008545) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tardbp (NM_001008545) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tardbp
Synonyms:	1190002A23Rik; C85084; TDP-43; Tdp43
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR225623 representing NM_001008545 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTGAATATATTCGGGTAACAGAAGATGAGAACGATGAACCCATTGAAATACCATCAGAAGACGATG
GGACGGTGTTGCTGTCCACAGTTACAGCCCAGTTTCCAGGGGCATGCGGCCTGCGCTACCGGAATCCCGT
GTCTCAGTGTATGAGAGGAGTCCGACTGGTGGAAGGAATTCTGCATGCCCCAGATGCTGGCTGGGGCAAT
CTGGTATATGTTGTCAACTATCCCAAAGATAACAAAAGGAAAATGGATGAGACAGATGCTTCCTCTGCAG
TGAAAGTGAAAAGAGCAGTCCAGAAAACATCTGACCTCATAGTGTTGGGTCTCCCCTGGAAAACAACTGA
GCAGGATCTGAAAGACTATTTCAGTACTTTTGGAGAGGTTCTTATGGTTCAGGTCAAGAAAGATCTTAAA
ACTGGTCACTCGAAAGGGTTTGGCTTTGTTCGATTTACAGAATATGAAACCCAAGTGAAAGTAATGTCAC
AACGACATATGATAGATGGGCGATGGTGTGACTGTAAACTTCCCAACTCTAAGCAAAGCCCAGACGAGCC
TTTGAGAAGCAGAAAGGTGTTTGTTGGACGTTGTACAGAGGACATGACTGCTGAAGAGCTTCAGCAGTTT
TTCTGTCAGTATGGAGAAGTGGTAGATGTCTTCATTCCCAAACCATTCAGAGCTTTTGCCTTCGTCACCT
TTGCAGATGATAAGGTTGCCCAGTCTCTTTGTGGAGAGGATTTGATCATTAAAGGAATCAGCGTGCATAT
ATCCAATGCTGAACCTAAGCATAATAGCAATAGACAGTTAGAAAGAAGTGGAAGATTTGGTGGTAATCCA
GGTGGCTTTGGGAATCAGGTTCATCTCATTTCAAATGTTTATGGAAGAAGCACTTCATTGAAAGTAGTGC
TG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>MR225623 representing NM_001008545
Red=Cloning site Green=Tags(s)

MSEYIRVTEDENDEPIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVSQCMRGVRLVEGILHAPDAGWGN
LVYVVNYPKDNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTTEQDLKDYFSTFGEVLMVQVKKDLK
TGHSKGFGFVRFTEYETQVKVMSQRHMIDGRWCDCKLPNSKQSPDEPLRSRKVFVGRCTEDMTAEELQQF
FCQYGEVVDVFIPKPFRAFAFVTFADDKVAQSLCGEDLIIKGISVHISNAEPKHNSNRQLERSGRFGGNP
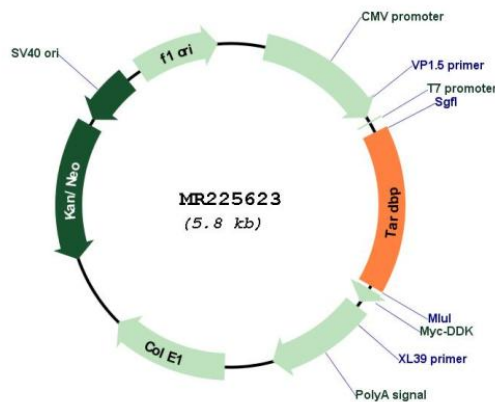GGFGNQVHLISNVYGRSTSLKVVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

* The last codon before the Stop codon of the ORF

Plasmid Map:

ACCN: NM_001008545

ORF Size: 912 bp

ORIGENE

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:	NM_001008545.2, NP_001008545.1
RefSeq Size:	6513 bp
RefSeq ORF:	915 bp
Locus ID:	230908
UniProt ID:	Q921F2
Cytogenetics:	4 E2
MW:	34.6 kDa
Gene Summary:	RNA-binding protein that is involved in various steps of RNA biogenesis and processing. Preferentially binds, via its two RNA recognition motifs RRM1 and RRM2, to GU-repeats on RNA molecules predominantly localized within long introns and in the 3' UTR of mRNAs. In turn, regulates the splicing of many non-coding and protein-coding RNAs including proteins involved in neuronal survival, as well as mRNAs that encode proteins relevant for neurodegenerative diseases. Plays a role in maintaining mitochondrial homeostasis by regulating the processing of mitochondrial transcripts. Regulates also mRNA stability by recruiting CNOT7/CAF1 deadenylase on mRNA 3' UTR leading to poly(A) tail deadenylation and thus shortening. In response to oxidative insult, associates with stalled ribosomes localized to stress granules (SGs) and contributes to cell survival. Participates also in the normal skeletal muscle formation and regeneration, forming cytoplasmic myo-granules and binding mRNAs that encode sarcomeric proteins. Plays a role in the maintenance of the circadian clock periodicity via stabilization of the CRY1 and CRY2 proteins in a FBXL3-dependent manner (PubMed:27123980).[UniProtKB/Swiss-Prot Function]