

Product datasheet for **MR205351**

Dtnbp1 (NM_025772) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dtnbp1 (NM_025772) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dtnbp1
Synonyms:	5430437B18Rik; AW048963; Bloc1s8; dysbindin; sdy
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205351 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGCTGGAGACCCTGCGCGAGCGGCTGCTGAGCGTACAGCAGGATTTACCTCCGGGCTGAAGACTTTAA
 GTGATAAGTCAAGAGAAGCAAAGTGAAGGCCAAACCCAGGACTGCTCCACGCTTACCGAAGTACTCTGC
 TGGACTAGAATTACTTAGCAGGTATGAGGATGCGTGGGCTGCACTTCACAGAAGAGCCAAGGAGTGTGCA
 GACGCTGGCGAGCTGGTGGACAGCGAGGTGGTCATGCTGTCTGCCACTGGGAGAAGAAGAGGACCAGCC
 TGAACGAGCTGCAGGGGAGCTGCAGCAGCTGCCGCTCTCCTGCAGGACTTGGAGTCTCTGATGGCAAG
 CCTGGCTCATTTAGAGACAAGTTTTGAAGAGGTAGAGAACCATTTGCTGCACCTGGAGGACTTGTGTGGG
 CAGTGTGAGTTAGAAAGACACAAGCAGGCCAGGCCAACACCTGGAGAGCTACAAGAAAAGTAAGAGGA
 AGGAGCTTGAAGCCTTCAAAGCTGAAGTGAAGTGCATACAGAGCACACAGAAGGCCCTGGAAATGGAGCACAC
 CCAGCAACTGAAGCTGAAGGAGCGGCAGAAGTTCTTCGAGGAAGCCTTCCAGCAGGACATGGAACAGTAC
 CTGTCCACGGGTACCTGCAGATCGCAGAGAGGCGAGAGCCTATGGGCAGCATGTCATCCATGGAAGTGA
 ATGTGGACGTGCTGGAGCAGATGGACCTGATGGACATCTCAGACCAGGAGGCTCTCGATGTCTTCTGAA
 CTCCGGCGGAGAGGACAACATTGTGATGTCCTTGGTGTGGAGATGGAATCCAACCCCAATCAGAATGAA
 ATGAGTCTTCAGATTCGAAGTCCCTCAGAATCAGCATCCAGCCACCTGCCTCACCTCTGCCTGCACTG
 ACCTGGACACTGCTGATGCCCCCTCATCCAGTCTGATGAGGAGGAGTACAGGTGGACACGGCCTTGGT
 CACATTACACACTGACAGAAAGTCCACCCAGGTGTCAGTGTGACAGTGACCAGTGTGACTCAACTCAG
 GACATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >MR205351 protein sequence
 Red=Cloning site Green=Tags(s)

MLETLRERLLSVQQDFTSGLKTLSDKSREAKVKGPRTAPRLPKYSAGLELLSRYEDAWAALHRRAKECA
 DAGELVDSEVVMLSAHWEKKRTSLNELQQQLQQLPALLQDLESLMASLAHLETSFEEVENHLLHLEDLCG
 QCCELERHKQAQAQHLESYKSKRKELEAFKAELDEHTQKALEMEHTQQLKLERQKFEEAFQQDMEQY
 LSTGYLQIAERREPMGSMSSMEVNVVDVLEQMDLMDISDQEALDVFLNSGGEDNIVMSPGVEMESNPQNQE
 MSLQIPSPSESASQPPASPSACTDLDTADAPLIQSDEEEVQVDTALVTLHTDRKSTPGVSDDSDQCDSTQ
 DI

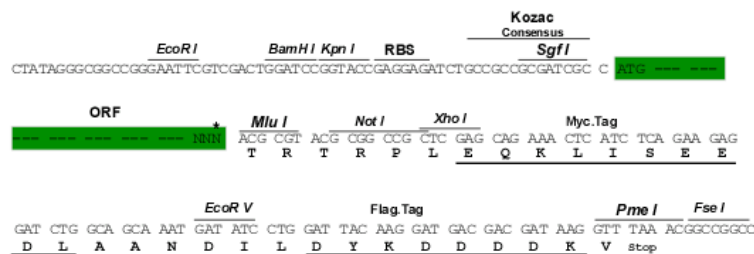
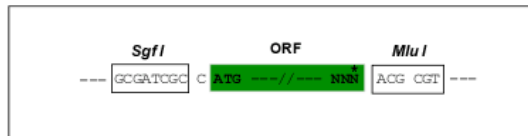
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_025772

ORF Size: 1056 bp

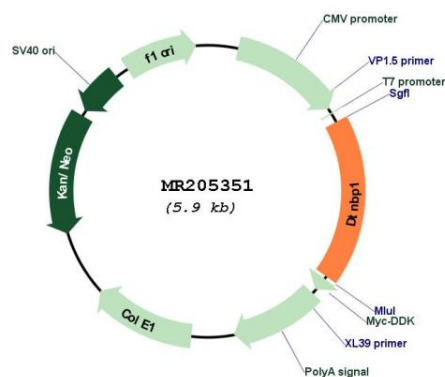
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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.

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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_025772.4</u> , <u>NP_080048.2</u>
RefSeq Size:	1311 bp
RefSeq ORF:	1059 bp
Locus ID:	94245
UniProt ID:	<u>Q91WZ8</u>
Cytogenetics:	13 21.73 cM
MW:	39.7 kDa
Gene Summary:	<p>Component of the BLOC-1 complex, a complex that is required for normal biogenesis of lysosome-related organelles (LRO), such as platelet dense granules and melanosomes. In concert with the AP-3 complex, the BLOC-1 complex is required to target membrane protein cargos into vesicles assembled at cell bodies for delivery into neurites and nerve terminals. The BLOC-1 complex, in association with SNARE proteins, is also proposed to be involved in neurite extension. Associates with the BLOC-2 complex to facilitate the transport of TYRP1 independent of AP-3 function. Plays a role in synaptic vesicle trafficking and in neurotransmitter release. Plays a role in the regulation of cell surface exposure of DRD2. May play a role in actin cytoskeleton reorganization and neurite outgrowth. May modulate MAPK8 phosphorylation. Appears to promote neuronal transmission and viability through regulating the expression of SNAP25 and SYN1, modulating PI3-kinase-Akt signaling and influencing glutamatergic release. Regulates the expression of SYN1 through binding to its promoter. Modulates prefrontal cortical activity via the dopamine/D2 pathway.[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR205351