

Product datasheet for MC224754

Robo1 (NM_019413) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Robo1 (NM_019413) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Robo1
Synonyms:	AW494633; AW742721; DUTT1; Gm310
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224754 representing NM_019413 Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATCGCGGAGCCTGCTCGCTTTACCTCTTTGGATTAATATGTCTCTGTTTCAGGCTCCCGTCTTCGTC
AGGAAGATTTTCCACCCCGCATTGTTGAACACCCTTCAGACCTGATCGTCTCAAAGGAGAACCTGCCAC
TCTGAAGTAAAGCCGAAGGCCCGCCACCCCGACGATAGAATGGTACAAAGGTGGGAAAGAGTGGAG
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TCCATGGACGGAAGAGTAGGCCGACGAAGGGTCTACATCTGTGTGGCTAGGAATTACCTCGGAGAGGC
TGTGAGCCACAACGCATCGCTGGAGGTAGCTATACTACGGGATGACTTCAGACAAAACCTTCAGATGTC
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TCACCATTACGAACGTCCAGCGTCTGATGTCGGTACTACATCTGTCAGACTTTAAATGTTGCTGGAAG
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CCCAGCGGTGAGGCCACGTGGAGCGCTTACATCGAAGTCCAGGAATTTGGGGTTCCAGTTCAACCCCAA
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 AGCAGAAAACACCAGCAGGACATCTGCGCAGGGAAGCCTACGAGATGATCTTCCACCCCTCCAGTGC
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 GGCCAAGAGGATATTCTCCGTACTGTAGACCTACTTTCCAACGTCAAACAACCTAGAGACCCAGTT
 CCTCCAGCTCTATGTCATCAAGAGGATCAGGGAGCCGACAAGAGAGCAAGCAAAATGTGGGCCGAAGGAA
 TATGGCAGAAATGCAAGTACTTGGGGGATTTGAAAGAGGAGATGAGAATAATGAAGAATTAGAGGAACT
 GAAAGCTGA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Chromatograms:	https://cdn.origene.com/chromatograms/ja1732_g04.zip
Restriction Sites:	Sgfl-RsrII
ACCN:	NM_019413
Insert Size:	4839 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	NM_019413.2 , NP_062286.2
RefSeq Size:	7568 bp
RefSeq ORF:	4839 bp
Locus ID:	19876
UniProt ID:	O89026
Cytogenetics:	16 C3.1
Gene Summary:	Receptor for SLIT1 and SLIT2 that mediates cellular responses to molecular guidance cues in cellular migration, including axonal navigation at the ventral midline of the neural tube and projection of axons to different regions during neuronal development (PubMed:10433822, PubMed:24560577). Interaction with the intracellular domain of FLRT3 mediates axon attraction towards cells expressing NTN1 (PubMed:24560577). In axon growth cones, the silencing of the attractive effect of NTN1 by SLIT2 may require the formation of a ROBO1-DCC complex (By similarity). Plays a role in the regulation of cell migration via its interaction with MYO9B; inhibits MYO9B-mediated stimulation of RHOA GTPase activity, and thereby leads to increased levels of active, GTP-bound RHOA (By similarity). May be required for lung development (PubMed:11734623).[UniProtKB/Swiss-Prot Function]