

## Product datasheet for RC227713

### ROBO1 (NM\_001145844) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ROBO1 (NM_001145844) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ROBO1
Synonyms:	axon guidance receptor; DUTT1; FLJ21882; MGC131599; MGC133277; roundabout, axon guidance receptor, homolog 1 (Drosophila); roundabout 1; SAX3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC227713 representing NM_001145844 Red=Cloning site Blue=ORF Green=Tags(s)

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**Protein Sequence:** >RC227713 representing NM\_001145844  
 Red=Cloning site Green=Tags(s)

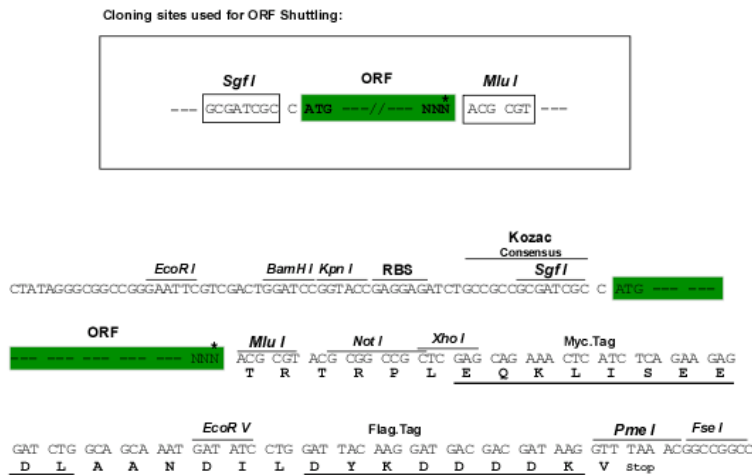
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**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3818\\_a02.zip](https://cdn.origene.com/chromatograms/mg3818_a02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



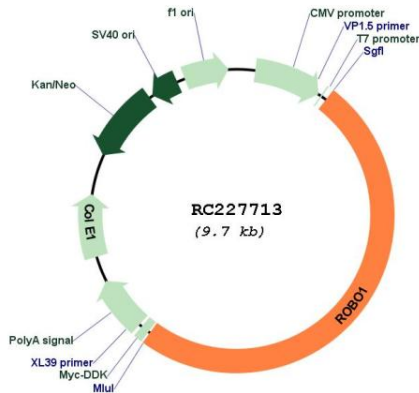
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001145844

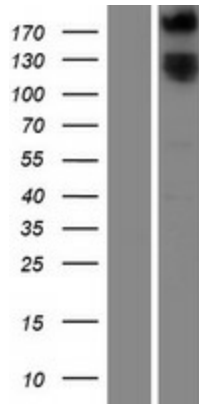
<b>ORF Size:</b>	4818 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001145844.1</a> , <a href="#">NP_001139316.1</a>
<b>RefSeq ORF:</b>	4820 bp
<b>Locus ID:</b>	6091
<b>Cytogenetics:</b>	3p12.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Axon guidance
<b>MW:</b>	175.7 kDa

**Gene Summary:**

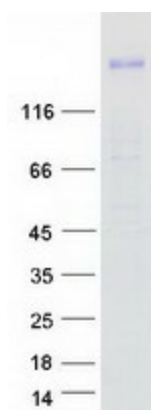
Bilateral symmetric nervous systems have special midline structures that establish a partition between the two mirror image halves. Some axons project toward and across the midline in response to long-range chemoattractants emanating from the midline. The product of this gene is a member of the immunoglobulin gene superfamily and encodes an integral membrane protein that functions in axon guidance and neuronal precursor cell migration. This receptor is activated by SLIT-family proteins, resulting in a repulsive effect on glioma cell guidance in the developing brain. A related gene is located at an adjacent region on chromosome 3. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

**Product images:**


Circular map for RC227713



Western blot validation of overexpression lysate (Cat# [LY429026]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227713 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ROBO1 protein (Cat# [TP327713]). The protein was produced from HEK293T cells transfected with ROBO1 cDNA clone (Cat# RC227713) using MegaTran 2.0 (Cat# [TT210002]).