

Product datasheet for SC109740

ROBO1 (NM_133631) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ROBO1 (NM_133631) Human Untagged Clone
Tag:	Tag Free
Symbol:	ROBO1
Synonyms:	DUTT1; SAX3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_133631 edited
 GAATTCGGCACCAGGCAAGACCGTGGAGCAGGAAACGGCACTACTGCGCTTCTGCCTCG
 GCTCTTTGTTGTCGCTTTGGATTCTTGAAGTGTCTGAGCCTCCTCGAAATCCTG
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_133631 unedited
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3' Read Nucleotide Sequence:

>OriGene 3' read for NM_133631 unedited
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ACAAGGGATGTTCTTACTCAATTGGGGCTTAAAAAAC

Restriction Sites:

NotI-NotI

ACCN:

NM_133631

Insert Size:

7300 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](#)

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_133631.1](#), [NP_598334.1](#)

RefSeq Size: 7475 bp

RefSeq ORF: 4839 bp

Locus ID: 6091

UniProt ID: [Q9Y6N7](#)

Cytogenetics: 3p12.3

Domains: ig, FN3

Protein Families: Druggable Genome

Protein Pathways: Axon guidance

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]

Transcript Variant: This variant (2) represents use of an alternate promoter and 5' UTR, uses a distinct translation start site, includes an alternate in-frame exon in the 5' coding region, and lacks an alternate in-frame exon in the central coding region, compared to variant 1. The resulting isoform (b) has a shorter and distinct N-terminus, compared to isoform a. The 5' UTR of this variant contains a 55 aa uORF with a strong Kozak signal that may inhibit translation of this protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.