

Product datasheet for **SC303253**

ROBO2 (NM_002942) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: ROBO2 (NM_002942) Human Untagged Clone
Tag: Tag Free
Symbol: ROBO2
Synonyms: SAX3
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for NM_002942, the custom clone sequence may differ by one or more nucleotides

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ATGAGTCTGCTGATGTTTACACAACACTGCTCTGTGGATTTTTATATGTTTCGGGTTGAT
GGATCGCGTCTTCGCCAGGAGGACTTTCCCGCGGATTGTGGAGCATCCTTCCGATGTC
ATCGTCTCTAAGGGCGAGCCACGACTCTGAACTGCAAGGCGGAGGGCCGCCAACGCC
ACCATTGAGTGGTACAAAGATGGGGAGCGAGTGGAGACTGACAAGGACGATCCCCGGTCC
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AGTCGAAATGCGTCTCTGGAAGTGGCATTGTTACGAGATGACTTCGACAAAACCCACA
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AGCCAATCAGTGAGCAACAGCTGGCAGACCGTGGCAAACCATGTAAGACCACCCCTCTAT
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ACTGTAAGAGGACTGCGGCCAATACAATCTACTTATTTCATGGTCAGAGCGATCAACCC
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CCAGCACAAAGGAGTGGACCACAGGCAAGTGCAGAAAGAGCTAGGAGATGTCCTTGTCCGT
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CCTGGATCCAGCATGGACAATCTAGACAGCTCTGTGACAGGAAAAGCCTTTACCTCCTCT
CAAAGACCTCGACCTACCAGCCATTTTCTACTGACAGTAACACCAGTGCAGCCCTGAGT
CAAAGTCAGAGGCCTCGGCCACTAAAAACACAAGGGAGGGCGGATGGACCAACAACCA
GCATTGCCTCATCGAAGGGAAGGAATGACAGATGAGGAGGCCTTGGTGCCTATAGCAAG
CCCAGTTTCCATCTCCAGGTGGCCACAGCTCATCAGGAACAGCTTCTTCTAAGGGATCC
ACTGGACCTAGGAAAACCGAGGTGTTGAGAGCAGGCCACCAGCGCAATGCCAGCGACCTT
CTTGACATAGGATATATGGGCTCCAACAGTCAAGGACAGTTTACAGGTGAATTATAG

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Restriction Sites:

Please inquire

ACCN:

NM_002942

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).

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	<u>NM_002942.1, NP_002933.1</u>
RefSeq Size:	5598 bp
RefSeq ORF:	4137 bp
Locus ID:	6092
UniProt ID:	<u>Q9HCK4</u>
Cytogenetics:	3p12.3
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Axon guidance
Gene Summary:	<p>The protein encoded by this gene belongs to the ROBO family, part of the immunoglobulin superfamily of proteins that are highly conserved from fly to human. The encoded protein is a transmembrane receptor for the slit homolog 2 protein and functions in axon guidance and cell migration. Mutations in this gene are associated with vesicoureteral reflux, characterized by the backward flow of urine from the bladder into the ureters or the kidney. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]</p> <p>Transcript Variant: This variant (2) lacks two alternate in-frame exons in the coding region compared to variant 4. The encoded protein (isoform ROBO2b; PMID 16829019) is shorter than variant 4. 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.</p>