

Product datasheet for RC226390

ROBO2 (NM_001128929) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ROBO2 (NM_001128929) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ROBO2
Synonyms:	SAX3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226390 representing NM_001128929 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226390 representing NM_001128929
 Red=Cloning site Green=Tags(s)

MARRHERVTRRMWTWAPGLLMMTVVFWGHQNGQGQGSRLRQEDFPFPRIVEHPSDVIVSKGPEPTLNCKA
 EGRPTPTIEWYKDERVETDKDDPRSHRMLLPSGSLFFLRIVHGRRSKPDEGSYVCVARNYLGEAVSRNA
 SLEVALLRDDFRQNPTDVVVAAGEPAILECQPPRGHPEPTIYWKDKVRIDDKEERISIRGGKLMISNTR
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 LPRGRYDIKDDYTLRIKKTMDSTDEGTMYCIAENRVGKMEASATLTVRAPPQFVVRPRDQIVAQGRVTFFP
 CETKGNPQPAVFWQKEGSQNLLFPNQPPQNSRCSVSPTGDLTITNIQRSDAGYIICQALTVAGSILAKA
 QLEVTDVLTDRPPPILQGPANQTLAVDGTALLKCKATGDPLPVISWLKEGFTFPRDRPRATIQEQGLQ
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 YSLPDQNKGNNGGKGGKKNKNSKPKQKNGSTWANVPLPPPPVQPLPGTELEHYAVEQQENGYSDSW
 CPPLPVQTYLHQGLEDELEEDDDRVPTPPVIRGVASSPAISFGQQSTATLTPSPREEMQPMQAHLDELTR
 AYQFDIAKQTWHIQSNNQPPQPPVPLGYVSGALISDLETDVADDADDEEEALEIPRPLRALDQTPGSS
 MDNLDSVVTGKAFTSSQRPPTSPFSTDSNTSAALSQSQRPRPTKKHKGGRMDQQPALPHRREGMTDEEA
 LVPYSKPSFPSPGGHSSSGTASSKSGTSPRKTEVLRAGHQRNASDLLDIGYMGNSNSQGFTEG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8006_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



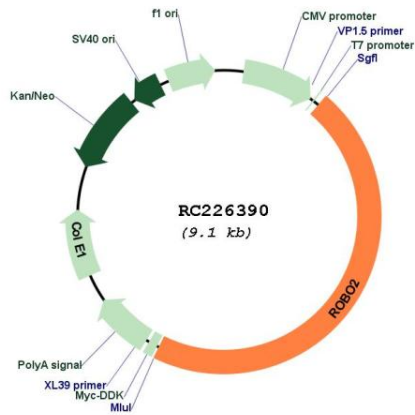
* The last codon before the Stop codon of the ORF

ACCN: NM_001128929

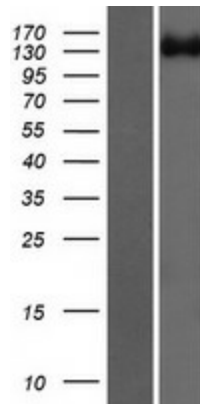
ORF Size: 4182 bp

OTI Disclaimer:	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.
RefSeq:	NM_001128929.3 , NP_001122401.1
RefSeq ORF:	4185 bp
Locus ID:	6092
UniProt ID:	Q9HCK4
Cytogenetics:	3p12.3
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Axon guidance
MW:	152.9 kDa
Gene Summary:	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]

Product images:



Circular map for RC226390



Western blot validation of overexpression lysate (Cat# [LY427030]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226390 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).