

Product datasheet for RC224282

ROBO2 (NM_002942) Human Tagged ORF Clone

Product data:

| | |
|--------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | ROBO2 (NM_002942) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | ROBO2 |
| Synonyms: | SAX3 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |
| ORF Nucleotide Sequence: | >RC224282 representing NM_002942 Red=Cloning site Blue=ORF Green=Tags(s) |

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Protein Sequence: >RC224282 representing NM_002942
 Red=Cloning site Green=Tags(s)

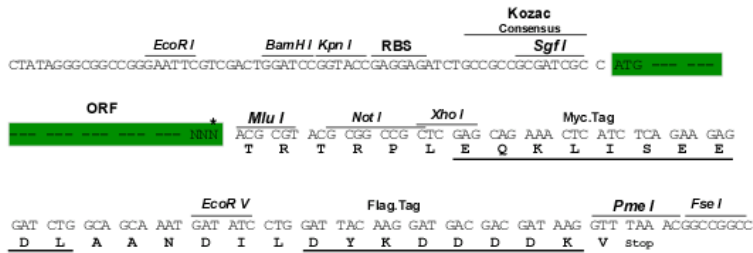
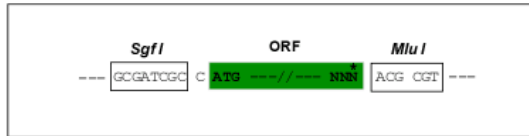
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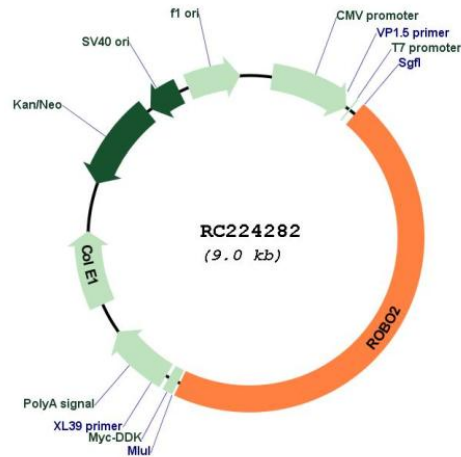
Restriction Sites:
Cloning Scheme:

SgfI-MluI

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_002942

ORF Size: 4134 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:

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_002942.5](#)

RefSeq Size: 8689 bp

RefSeq ORF: 4137 bp

Locus ID: 6092

UniProt ID: [Q9HCK4](#)

Cytogenetics: 3p12.3

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Axon guidance

MW: 151.2 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]