

## Product datasheet for **RG219851**

### VEGF Receptor 2 (KDR) (NM\_002253) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | VEGF Receptor 2 (KDR) (NM_002253) Human Tagged ORF Clone                    |
| Tag:                      | TurboGFP  |
| Symbol:                   | VEGF Receptor 2   |
| Synonyms:                 | CD309; FLK1; VEGFR; VEGFR2  |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-AC-GFP (PS100010)   |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| ORF Nucleotide Sequence:  | >RG219851 representing NM_002253<br>Red=Cloning site Blue=ORF Green=Tags(s) |

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GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

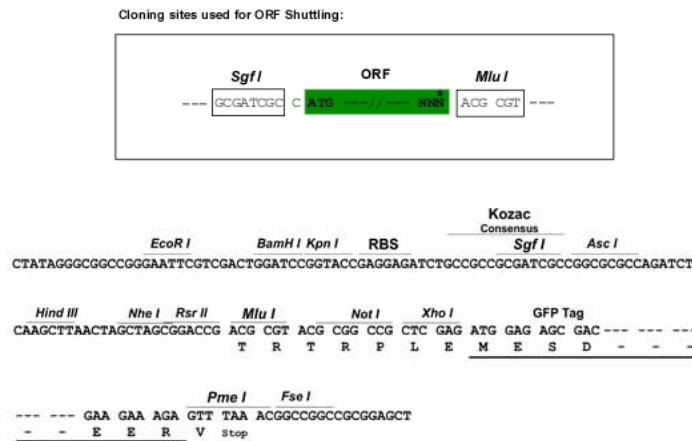
**Protein Sequence:** >RG219851 representing NM\_002253  
 Red=Cloning site Green=Tags(s)

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 FKDNETLVEDSGIVLKDGNRNLTI RRVKED EGLYTCQACSVLGCAKVEAFFIIEGAQEKTNLEI IILVG  
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TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

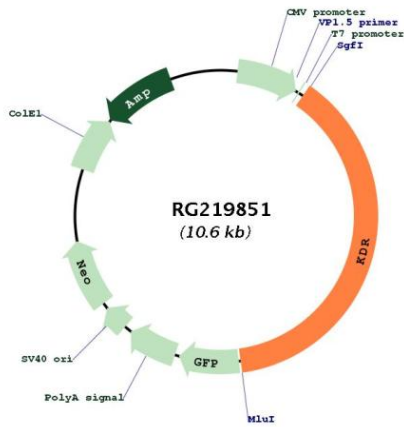


**ACCN:** NM\_002253

**ORF Size:** 4068 bp

|                               |  |
|-------------------------------|--|
| <b>OTI Disclaimer:</b>        | 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>   |
| <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>RefSeq:</b>                | <a href="#">NM_002253.1</a> , <a href="#">NP_002244.1</a>  |
| <b>RefSeq Size:</b>           | 6055 bp  |
| <b>RefSeq ORF:</b>            | 4071 bp  |
| <b>Locus ID:</b>              | 3791   |
| <b>UniProt ID:</b>            | <a href="#">P35968</a>   |
| <b>Cytogenetics:</b>          | 4q12   |
| <b>Domains:</b>               | pkinase, TyrKc, S_TKc, ig, IGc2, IG  |
| <b>Protein Families:</b>      | Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane   |
| <b>Protein Pathways:</b>      | Cytokine-cytokine receptor interaction, Endocytosis, Focal adhesion, VEGF signaling pathway  |
| <b>Gene Summary:</b>          | Vascular endothelial growth factor (VEGF) is a major growth factor for endothelial cells. This gene encodes one of the two receptors of the VEGF. This receptor, known as kinase insert domain receptor, is a type III receptor tyrosine kinase. It functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. The signalling and trafficking of this receptor are regulated by multiple factors, including Rab GTPase, P2Y purine nucleotide receptor, integrin alphaVbeta3, T-cell protein tyrosine phosphatase, etc.. Mutations of this gene are implicated in infantile capillary hemangiomas. [provided by RefSeq, May 2009] |

Product images:



Circular map for RG219851