

# **Product datasheet for RG211665**

## KSR2 (NM\_173598) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** KSR2 (NM\_173598) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: KSR2

Mammalian Cell Neomycin

Selection:

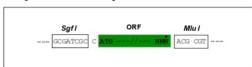
**Vector:** pCMV6-AC-GFP (PS100010)

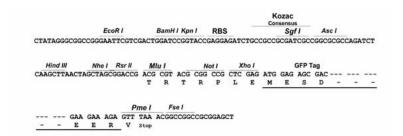
E. coli Selection: Ampicillin (100 ug/mL)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 









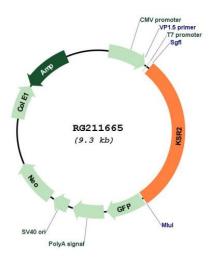
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#### Plasmid Map:



**ACCN:** NM\_173598 **ORF Size:** 2763 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.



### KSR2 (NM\_173598) Human Tagged ORF Clone - RG211665

RefSeq: <u>NM 173598.4</u>, <u>NP 775869.3</u>

 RefSeq Size:
 17008 bp

 RefSeq ORF:
 2853 bp

 Locus ID:
 283455

 UniProt ID:
 Q6VAB6

**Cytogenetics:** 12q24.22-q24.23

**Protein Families:** Druggable Genome, Protein Kinase

Gene Summary: Location-regulated scaffold connecting MEK to RAF. Has very low protein kinase activity and

can phosphorylate MAP2K1 at several Ser and Thr residues with very low efficiency (in vitro). Interaction with BRAF enhances KSR2-mediated phosphorylation of MAP2K1 (in vitro). Blocks MAP3K8 kinase activity and MAP3K8-mediated signaling. Acts as a negative regulator of MAP3K3-mediated activation of ERK, JNK and NF-kappa-B pathways, inhibiting MAP3K3-

mediated interleukin-8 production.[UniProtKB/Swiss-Prot Function]