

Product datasheet for **RG207668**

FCSK (NM_145059) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FCSK (NM_145059) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FCSK
Synonyms:	1110046B12Rik; CDGF2; FUK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207668 representing NM_145059 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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CTGAGTCCCGGGCAGGCTTCACTGTGGTCACATCCGATGTCCTGCACTCGGCCCTGGATCCTCATTCTGC
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CGTCTACCTAACTGACCCCAAGGCCTTGTGGGACATTTACTACCAGGGCACTGAGGCAGAGATTGAG
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AGCGCCTCCTAGCCACCCAGTGTGAGCCCGCCCTGGATGCCTGCACCTACCTAGGCTTGGACTCCGGAGC
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TTTCCTGTGCTCCACCCCTCGAGGGAGCTGGGACCCAGGACCTGCTGTGGATGCTGGACCACCAGGAGG
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 GAGGGCCTTGGGAATTACAGCATCCACCTGGTTGAAGTGACACTCAGGGCCTGAGCCTGAAGCTGCTGG
 GGACCAGGCCTCAACCTGTTGCCCTTTCCCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG207668 representing NM_145059
 Red=Cloning site Green=Tags(s)

MEQPKGVDWTVIILTCQYKDSVQVFQRELEVRQKREQIPAGTLLLAVEDPEKRVGSSGATLNALLVAAEH
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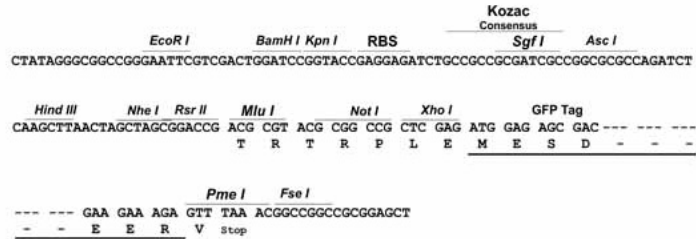
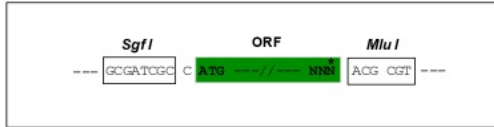
TRTRPLE - GFP Tag - V

Restriction Sites:

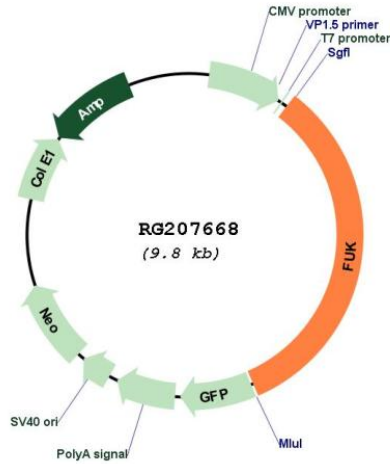
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_145059
 ORF Size: 3252 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_145059.3](#)

RefSeq Size: 3923 bp

RefSeq ORF: 3255 bp

Locus ID: 197258

UniProt ID: [Q8N0W3](#)

Cytogenetics: 16q22.1

Domains: GHMP_kinases

Protein Families: Druggable Genome

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Metabolic pathways

Gene Summary:

The protein encoded by this gene belongs to the GHMP (galacto-, homoserine, mevalonate and phosphomevalonate) kinase family and catalyzes the phosphorylation of L-fucose to form beta-L-fucose 1-phosphate. This enzyme catalyzes the first step in the utilization of free L-fucose in glycoprotein and glycolipid synthesis. L-fucose may be important in mediating a number of cell-cell interactions such as blood group antigen recognition, inflammation, and metastasis. While several transcript variants may exist for this gene, the full-length nature of only one has been described to date. [provided by RefSeq, Jul 2008]