

Product datasheet for **RG211694**

LY6G5C (NM_025262) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	LY6G5C
Synonyms:	C6orf20; G5C; LY6G5CA; LY6G5CB; NG33
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG211694 representing NM_025262
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTGCTGACTCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGGCCCTGCAGGGAGCCAGAGTCTGGGTCCCCTGTGCTTCCACAGCAGCCCCAAGCCCTCTACA
CGGTCTCTTAATAGTGTGCTGGTCATGATGAGCTTGGTGTGGTAAAGTTTGTTCCTGTCAATTGGGAACC
CCCTCAACCACTTCCATCCCCAAATACCTGCGCTGCTACCGATGCCTCTTGGAGACCAAGGAGTTAGGG
TGCTTCTGGGATCTGACATCTGCCTCACCCAGCTGGCAGCAGCTGCATCACTCTCCACAAAAAGAACA
GCAGCGGTTCTGACGTCACTGGTGAGTGACTGCCGAAGTAAGGAGCAGATGAGTGATTGTTCAAATACCCG
AACTTCTCCGGTGTCTGGCTTCTGGATATTCTCTCAATACTGCTTCTGGAATTTCTGCAATGACCCTCAA
AACAGAGGGCTCTATACTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG211694 representing NM_025262
Red=Cloning site Green=Tags(s)

MAGPAGSQLGPLCFHSSPQALYTVLLIVLVMMSLVFGKFVPVNWEPPQPLPFPKYLRCYRCLLETKELG
CLLGSIDICLTPAGSSCITLHKKNSSGSDVMVSDCRSKEQMSDCSNTRTSPVSGFWIFSQYCFDLFCNDPQ
NRGLYTP

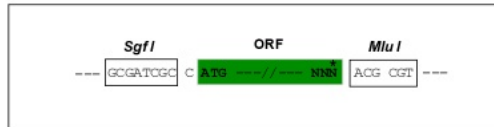
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:

Cloning sites used for ORF Shuttling:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT
 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAAGTACTAGTAGCGGACG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---
 T R T R P L E M E S D - - -
 --- --- GAA GAA AGA GTT TAA ACGGCCGCCCGGAGCT
 - - E E R V Stop

ACCN: NM_025262

ORF Size: 441 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_025262.2](#), [NP_079538.2](#)

RefSeq Size: 729 bp
RefSeq ORF: 453 bp
Locus ID: 80741

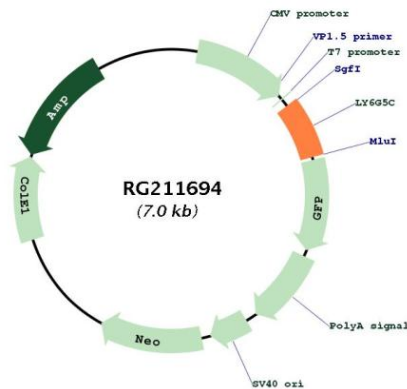
UniProt ID: [Q5SRR4](#)

Cytogenetics: 6p21.33

Protein Families: Transmembrane

Gene Summary: LY6G5C belongs to a cluster of leukocyte antigen-6 (LY6) genes located in the major histocompatibility complex (MHC) class III region on chromosome 6. Members of the LY6 superfamily typically contain 70 to 80 amino acids, including 8 to 10 cysteines. Most LY6 proteins are attached to the cell surface by a glycosylphosphatidylinositol (GPI) anchor that is directly involved in signal transduction (Mallya et al., 2002 [PubMed 12079290]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG211694