

## Product datasheet for **RG223549**

### LYG2 (NM\_175735) Human Tagged ORF Clone

#### Product data:

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                         |
| Product Name:             | LYG2 (NM_175735) Human Tagged ORF Clone                                     |
| Tag:                      | TurboGFP                                                                    |
| Symbol:                   | LYG2                                                                        |
| Synonyms:                 | LYGA2; LYGH; LYSG2                                                          |
| Mammalian Cell Selection: | Neomycin                                                                    |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                     |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                      |
| ORF Nucleotide Sequence:  | >RG223549 representing NM_175735<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTTATCCTCCGTGGTGTGTTTGGGGACTAATTGCCCTCATTGGCACTTCCAGGGGCTCATACCCCTTCA  
 GTCACCTCAATGAAGCCTCACCTACATCCACGCCTGTACCACGGCTGCTATGGGGACATCATGACCATGAA  
 GACCTCTGGGGCCACTTGTGATGCAAACAGTGTGATGAACTGCGGGATCCGTGGTTCTGAAATGTTTGCT  
 GAGATGGATTTGAGGGCCATAAAACCTTACCAGACTCTGATCAAAGAAGTCGGGCAGAGACATTGCGTGG  
 ACCCTGCTGTCATCGCAGCCATCATCTCCAGGGAAAGCCATGGCGGATCTGTCCTGCAAGACGGCTGGGA  
 CCACAGGGGACTTAAATTTGGCTTGATGCAGCTTGATAAAACAAACGTACCACCCTGTCGGTGCCTGGGAT  
 AGCAAAGAGCACCTTTACAGGCTACTGGGATTCTAACAGAGAGAATTAAGGCAATCCAGAAAAAATTCC  
 CCACGTGGAGTGTTGCTCAGCACCTCAAAGGTGGTCTCTCAGCTTTTAAGTCAGGAATTGAAGCGATTGC  
 CACCCCATCGGACATAGACAATGACTTCGTCATGATATCATTGCTCGAGCTAAGTTCTATAAAAGACAA  
 AGCTTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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**Protein Sequence:** >RG223549 representing NM\_175735  
Red=Cloning site Green=Tags(s)

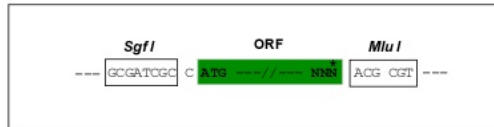
MLSSVFWGLIALIGTSRGSYPFSSHMKPHLHPRLYHGCYGDIMTKTSGATCDANSVMNCGIRGSEMFA  
EMDLRAIKPYQTLIKEVGQRHCVDPAVIAAIIISRESHGGSVLQDGWDHRLKFGMLQLDKQTYHPVGAWD  
SKEHLSQATGILTERIKAIQKKFPTWSVAQHLKGGLSAFKSGIEAIATPSDIDNDFVNDIARAKFYKRQ  
SF

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



CTATAGGGCGGGCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGGCCGGAGCT

- - E E R V Stop

PmeI FseI

**ACCN:** NM\_175735

**ORF Size:** 636 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\\_175735.3](#), [NP\\_783862.2](#)

**RefSeq Size:** 880 bp

**RefSeq ORF:** 639 bp

**Locus ID:** 254773

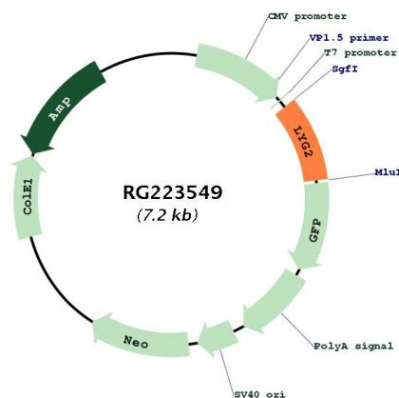
**UniProt ID:** [Q86SG7](#)

**Cytogenetics:** 2q11.2

**Protein Families:** Secreted Protein

**Gene Summary:** The protein encoded by this gene contains a SLT domain, a protein domain present in bacterial lytic transglycosylase (SLT) and in eukaryotic lysozymes (GEWL). SLT domain catalyzes the cleavage of the beta-1,4-glycosidic bond between N-acetylmuramic acid (MurNAc) and N-acetylglucosamine (GlcNAc). [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG223549