

## Product datasheet for **RC238641**

### GGT5 (NM\_001302465) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GGT5 (NM_001302465) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GGT5
Synonyms:	GGL; GGT-REL; GGT 5; GGTLA1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC238641 representing NM\_001302465  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCCCCGGGCTACGGGGCCACGGTCAGCCTAGTCTGTGGTCTGGGGCTGGCGCTGGCTGTCAATTG  
 TGCTGGCTGTGGTCTCTCTCGACACCAGGCCCATGTGGCCCCAGGCCTTTGCCACCGTGTGTTC  
 CGCCGACTCCAAGGTCTGCTCGGATATTGGACGGGGCCAGTGGATCGGGGTGCCCGGGAGCTCCGTGG  
 CTATGCCGAGGCCACCGCCCATGGCCGCTGCCCTGGGCGCAGCTGTTCCAGCCCACCATCGCGCTG  
 CTCGAGGGGGGATGTGGTGGCCCTGTCTCAGCCGTTTCTGCACAACAGCATCCTGCGGCCTTCT  
 TGCAGGCGTCAACCTGCGCTCTTCTTCAACGGGACAGAACCCCTGAGGCCTCAGACCCACTCCCATGG  
 CCTGCACTGGCCACCACCCTGGAGACCTGGCCACAGAGGGCGTGGAGGTCTTACACGGGGAGGCTGG  
 GCCAGATGCTGGTGGAGACATTGCCAAGGAAGGGAGCCAGCTGACGCTGCAGGACCTGGCCAAGTTCCA  
 GCCGAGGTGGTGGATGCCCTGGAGGTGCCCTGGGGACTATACCCTGTACTCACCACCGCCGCTGCA  
 GGGGTGCCATTCTCAGCTTTATCCTCAACGTGCTAAGAGGGTTCAACTTCTCAACAGAGTCTATGGCCA  
 GGCTGAAGGGAGGGTGAACGTGTACCACCACCTGTAGAGACGCTCAAGTTTGGCAAGGGGAGAGGTG  
 GAGGTGGGGACCTCGAAGCCACCGAAGCTCCAGAATGCCTCCCGGGACCTGCTGGGGGAGACCCTG  
 GCCAGCTCATCCGCAACAGATCGATGGCCGGGGGACCACCAGCTCAGCCACTACAGCTTGGCCGAGG  
 CCTGGGGCCACGGGACAGGCACGTCCCATGTGTCTGTGCTGGGGGAGGATGGCAGCGCCGTGGCTGCCAC  
 CAGCACCATCAACACACCCTTTGGAGCGATGGTGTATTCACCACGGACAGGCATCATCTCAACAACGAG  
 CTCCTGGACTTATGCGAGCGATGCCCGGGGTTCCGGCACCACCCCTCACCTGCAGTGGTGGAGACA  
 GGGTGGGTGGAGTCCCGAAGGTGCTGGCCCCCAGTTCAGGGGAGCGTTCCTCATCTCCATGGTGGC  
 CTCATCTTGATCAACAAGCCAGGGGTGCAAGCTAGTGATTGGCGGGGCTGGCGGGAGCTCATTATC  
 TCTGCTGTGGCCAGGCCATCATGAGCAAGCTGTGGCTTGGCTTTGACCTGAGAGCGGCCATTGCAGCCC  
 CCATCCTGCATGTCAACAGCAAGGGCTGTGTGGAGTACGAGCCCACTTCCAGCCAGGAGGTGCAGAGGGG  
 ACTCCAAGACCGTGGCCAGAACCAGACCAGAGGCCCTTCTTCTGAACGTGGTCCAGGCTGTGTCCAG  
 GAGGGGCTGTGTACGCCGCTCGGACCTGAGGAAGAGTGGGGAGGCCCGAGGCTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238641 representing NM\_001302465  
 Red=Cloning site Green=Tags(s)

MARGYGATVSLVLLGLGLALAVIVLAVVLSRHQAPCGPQAF AHAAVAADSKVCSIDIGRPVDRGARGAPW  
 LCRGPPPPWPPALGAAVPAHHRAAPRGACGGPCPQPFPAQQHAAFLAGVNPALFFNGTEPLRPQDPLPW  
 PALATTLETVATEGVEVFTGRLGQMLVEDIAKEGSQLTLQDLAKFQPEVVDALVPLGDYTLSPPPPA  
 GGAILSFILNVLRGFNSTESMARPEGRVNVYHHLVETLKFAGQRWRLGDRSHPKLQNASRDLLGETL  
 AQLIRQQIDGRGDHQLSHYSLAEAWGHGTGTSHVSVLGEDGSAVAATSTINTPFAMVYSPRTGIILNNE  
 LLDLCERCPRGSGTTPSPAVSGDRVGGAPGRCWPPVPGERSPSSMVPSILINKAQSKLVIGGAGGELII  
 SAVAQAIMSKLWLGFDLRAAIAAPILHVNSKGCVEYEPNFSQEVQRGLQDRGQNQTQRPFFLNVVQAVSQ  
 EGACVYAVSDLRKSGEAAGY

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

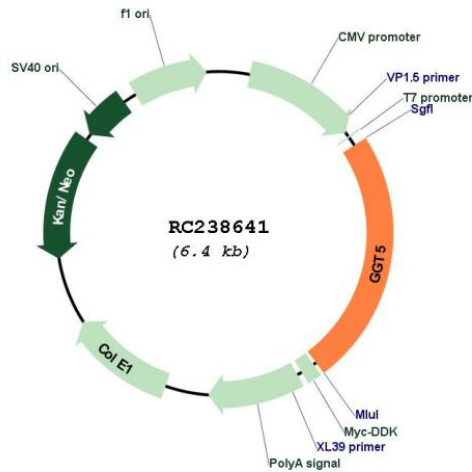
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001302465

**ORF Size:** 1530 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).

<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_001302465.1</a> , <a href="#">NP_001289394.1</a>
<b>RefSeq Size:</b>	2283 bp
<b>RefSeq ORF:</b>	1533 bp
<b>Locus ID:</b>	2687
<b>UniProt ID:</b>	<a href="#">P36269</a>
<b>Cytogenetics:</b>	22q11.23
<b>Protein Families:</b>	Protease, Transmembrane
<b>Protein Pathways:</b>	Arachidonic acid metabolism, Cyanoamino acid metabolism, Glutathione metabolism, Metabolic pathways, Selenoamino acid metabolism, Taurine and hypotaurine metabolism
<b>MW:</b>	54.2 kDa
<b>Gene Summary:</b>	This gene is a member of the gamma-glutamyl transpeptidase gene family, and some reports indicate that it is capable of cleaving the gamma-glutamyl moiety of glutathione. The protein encoded by this gene is synthesized as a single, catalytically-inactive polypeptide, that is processed post-transcriptionally to form a heavy and light subunit, with the catalytic activity contained within the small subunit. The encoded enzyme is able to convert leukotriene C4 to leukotriene D4, but appears to have distinct substrate specificity compared to gamma-glutamyl transpeptidase. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Oct 2014]