

## Product datasheet for **RC209946**

### GGT5 (NM\_004121) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GGT5 (NM_004121) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GGT5
Synonyms:	GGL; GGT-REL; GGT 5; GGTLA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC209946 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCCCGGGCTACGGGGCCACGGTCAGCCTAGTCTGTGGTCTGGGGCTGGCGCTGGCTGTCAATTG  
 TGCTGGCTGTGGTCTCTCTCGACACCAGGCCCATGTGGCCCCAGGCCTTTGCCACGCTGCTGTTGC  
 CGCCGACTCCAAGGTCTGCTCGGATATTGGACGAGCCATCCTCCAGCAGCAGGGCTCACCCGTGGATGCC  
 ACCATCGCGGCTCTGGTCTGCACCAGCGTCGTAACCCTCAGAGCATGGGCCTGGGCGGAGGGGTGATCT  
 TCACCATCTACAATGTGACAACAGGAAGGTGGAGGTCAATGCCCGGAGACGGTCCGGCCAGCCA  
 CGCCCCGAGCCTGCTGGACCACTGTGCACAGGCTCTGCCACTGGGCACAGGGGCCAGTGGATCGGGGTG  
 CCCGGGGAGCTCCGTGGCTATGCCGAGGCCACCGCCCATGGCCGCTGCCCTGGGCGCAGCTGTTCC  
 AGCCACCATCGCGCTGCTCCGAGGGGGCATGTGGTGGCCCTGTCTCAGCCGTTTCTGCACAACAG  
 CATCTGCGGCCCTCCTTGCAGGCGTCAACCCTGCGCCAGCTCTTCTAACGGGACAGAACCCCTGAGG  
 CCTCAGGACCCACTCCCATGGCCTGCACTGGCCACCACCCTGGAGACCGTGGCCACAGAGGGCGTGGAGG  
 TCTTCTACACGGGGAGGCTGGGCCAGATGCTGGTGGAGGACATTGCCAAGGAAGGAGCCAGCTGACGCT  
 GCAGGACCTGGCCAAGTTCAGCCCCGAGGTGGTGGATGCCCTGGAGGTGCCCTGGGGGACTATACCCTG  
 TACTCACCACCGCCGCTGCAGGGGGTGCATTCTCAGCTTTATCCTCAACGTGCTAAGAGGGTTCAACT  
 TCTCAACAGAGTCTATGGCCAGGCTGAAGGGAGGGTGAACGTGTACCACCACCTGTAGAGACGCTCAA  
 GTTTGCCAAGGGGAGAGGTGGAGGTGGGGGACCCTCGAAGCCACCCGAAGTCCAGAATGCCTCCCGG  
 GACCTGCTGGGGGAGACCCTGGCCAGCTCATCCGCCAACAGATCGATGGCCGGGGGACCACCAGCTCA  
 GCCACTACAGCTTGGCCGAGGCTGGGGCCACGGGACAGGCACGTCATGCCATGTGTCTGTGGGGGAGGA  
 TGGCAGCGCCGTGGCTGCCACCAGCACCAACAACACCCTTTGGAGCGATGGTGTATTACCACCGGACA  
 GGCATCATCTCAACAACGAGCTCCTGGACTTATGCGAGCGATGCCCCGGGGTTCGGCCACCACCCCT  
 CACCTGCAGTGAGTGGAGACAGGGTGGGTGGAGCTCCCGAAGGTGCTGGCCCCAGTTCAGGCGAGCG  
 TTCCCCATCTCCATGGTGCCTCCATCTTGATCAACAAAGCCAGGGTGAAGCTAGTGATTGGCGGG  
 GCTGGCGGGGAGCTCATCATCTCTGCTGTGGCCAGGCCATCATGAGCAAGCTGTGGCTTGGCTTGGACC  
 TGAGAGCGGCCATTGCAGCCCCATCCTGCATGTCAACAGCAAGGGCTGTGTGGAGTACGAGCCCAACT  
 CAGCCAGGAGGTGCAGAGGGGACTCCAAGACCGTGGCCAGAACCAGACCAGAGGCCCTTCTTCTGAAC  
 GTGGTCCAGGCTGTGCCAGGAGGGGGCTGTGTGTACGCCGCTCTCGGACCTGAGGAAGAGTGGGGAGG  
 CCGCAGGCTAC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC209946 protein sequence  
 Red=Cloning site Green=Tags(s)

MARGYGATVSLVLLGLGLALAVIVLAVVLSRHQAPCGPQAFAHAAVAADSKVCSDIGRAILQQQGSVPDA  
 TIAALVCTSVVNPQSMGLGGGVIFTIYNVTTGKVEVINARETVPASHAPSLLDQCAQALPLGTGAQWIGV  
 PGELRGYAEAHRRHGRPLWAQLFQPTIALLRGGHVVPVLSRFLHNSILRPSLQASTLRQLFFNGTEPLR  
 PQDPLPWPALATTLETVATEGVEVFYTGRLQMLVEDIAKEGSQLTLQDLAKFQPEVVDALVPLGDYTL  
 YSPPPPAGGAILSFILNVLRGFNFSTESMARPEGRVNVYHHLVETLKFQKQWRWLDPRSHPKLQNASR  
 DLLGETLAQLIRQQIDGRGDHQLSHYSLAEAWGHGTGTHVSVLGEDGSAVAATSTINTPFAMVYSPRT  
 GIILNELLDLCEPRGSGTTPSPAVSGDRVGGAPGRCWPPVPGERSPSSMVPSILINKAQGSKLVIGG  
 AGGELIISAVAQAIMSKLWLGFDLRAAIAAPILHVNSKGCVEYEPNFSQEVQRGLQDRGQNTQRPFFLN  
 VVQAVSQEGACVYAVSDLRKSGEAAGY

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6821\\_b06.zip](https://cdn.origene.com/chromatograms/mk6821_b06.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_004121

ORF Size: 1761 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.

RefSeq: [NM\\_004121.4](#)

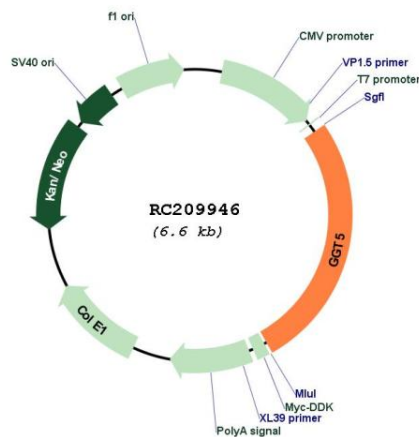
RefSeq Size: 2497 bp

RefSeq ORF: 1761 bp

Locus ID: 2687

UniProt ID:	<a href="#">P36269</a>
Cytogenetics:	22q11.23
Domains:	G_glu_transpept
Protein Families:	Protease, Transmembrane
Protein Pathways:	Arachidonic acid metabolism, Cyanoamino acid metabolism, Glutathione metabolism, Metabolic pathways, Selenoamino acid metabolism, Taurine and hypotaurine metabolism
MW:	62.3 kDa
Gene Summary:	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]

### Product images:



Circular map for RC209946