

Product datasheet for **RC218872**

GGT5 (NM_001099782) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GGT5 (NM_001099782) 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:

>RC218872 representing NM_001099782
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCCCGGGCTACGGGGCCACGGTCAGCCTAGTCTGTGGTCTGGGGCTGGCGCTGGCTGTCAATTG
 TGCTGGCTGTGGTCTCTCTCGACACCAGGCCCATGTGGCCCCAGGCCTTTGCCACGCTGCTGTTGC
 CGCCGACTCCAAGTCTGCTCGGATATTGGACGAGCCATCCTCCAGCAGCAGGGCTCACCCGTGGATGCC
 ACCATCGCGGCTCTGGTCTGCACCAGCGTCGTAACCCTCAGAGCATGGGCCTGGGCGGAGGGGTATCT
 TCACCATCTACAATGTGACAACAGGGGCCAGTGGATCGGGTGCCCGGGGAGCTCCGTGGCTATGCCGA
 GGCCACCGCCGCATGGCCGCTGCCCTGGGCGCAGCTGTTCCAGCCCACCATCGCGTCTCCGAGGG
 GGGCATGTGGTGGCCCTGTCTCAGCCGTTTCTGCACAACAGCATCCTGCGGCCTTCTTGCAGGCGT
 CAACCTCGCGCCAGCTCTTCTTCAACGGGACAGAACCCCTGAGGCCTCAGGACCCACTCCATGGCTGC
 ACTGGCCACCACCCTGGAGACCTGGCCACAGAGGGCGTGGAGGTCTTACACGGGGAGGCTGGGCCAG
 ATGCTGGTGGAGGACATTGCCAAGGAAGGGAGCCAGCTGACGCTGCAGGACCTGGCCAAGTTCAGCCCG
 AGGTGGTGGATGCCCTGGAGGTGCCCTGGGGACTATACCCTGTACTACCACCGCCGCTGCAGGGGG
 TGCCATTCTCAGCTTTATCCTCAACGTGCTAAGAGGGTTCAACTTCTCAACAGAGTCTATGGCCAGGCC
 GAAGGGAGGGTGAACGTGTACCACCACCTGTAGAGACGCTCAAGTTTGCCAAGGGGAGAGGTGGAGGC
 TGGGGGACCCTCGAAGCCACCCGAAGCTCCAGAATGCCTCCCGGGACCTGCTGGGGGAGACCCTGGCCCA
 GCTCATCCGCCAACAGATCGATGGCCGGGGGACCACCAGCTCAGCCACTACAGCTTGGCCGAGGCGCTGG
 GGCCACGGGACAGGCACGTCCCATGTGTCTGTGCTGGGGGAGGATGGCAGCGCCGTGGCTGCCACCAGCA
 CCATCAACACACCCTTTGGAGCGATGGTGTATTACCACGGACAGGCATCATCCTCAACAACGAGCTCCT
 GGACTTATGCGAGCGATGCCCCCGGGTTCCGGCACACCCTCACCTGTGAGTGGAGACAGGGTGGGT
 GGAGCTCCCGGAAGGTGCTGGCCCCAGTTCAGGCGAGCGTTCCTCCATCCTCCATGGTGCCTCCATCT
 TGATCAACAAAGCCAGGGGTGGAAGCTAGTGATTGGCGGGGCTGGCGGGGAGCTCATCATCTCTGCTGT
 GGCCAGGCCATCATGAGCAAGCTGTGGCTTGGCTTTGACCTGAGAGCGGCCATTGCAGCCCCATCCTG
 CATGTCAACAGCAAGGGCTGTGTGGAGTACGAGCCCACTCAGCCAGGAGGTGCAGAGGGGACTCCAAG
 ACCGTGGCCAGAACCAGACCAGAGGCCCTTCTCCTGAACGTGGTCCAGGCTGTGTCCAGGAGGGGGC
 CTGTGTGTACGCCGCTCTCGGACCTGAGGAAGAGTGGGGAGGCCGAGGCTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218872 representing NM_001099782
 Red=Cloning site Green=Tags(s)

MARGYGATVSLVLLGLLALAVIVLAVVLSRHQAPCPQAFHAHAVAADSKVCSIDIGRAILQQQSPVDA
 TIAALVCTSVVNPQSMGLGGGVIFTIYNVTTGAQWIGVPGELRGYAEAHRRHGRLPWAQLFQPTIALLRG
 GHVVAPVLSRFLHNSILRPSLQASTLRQLFFNGTEPLRPQDPLPWPALATTLETVATEGVEVFTGRLGQ
 MLVEDIAKEGSQLTLQDLAKFQPEVVDALVPLGDYTLSPPPPAGGAILSFILNVLRFNFSTESMARP
 EGRVNVYHHLVETLKFAGQWRWLDPRSHPKLQNASRDLLGETLAQLIRQQIDGRGDHQLSHYSLAEAW
 GHGTGTSHSVVLGEDGSAVAATSTINTPFAMVYSPRTGIILNNEILLDLERCPRGSGTTPSPVSGDRVG
 GAPGRCWPPVPGERSPSSMVPSILINKAQGSKLVIGGAGGELIISAVAQAIMSKLWLGFDLRAAIAAPIL
 HVNSKGCVEYEPNFSQEVQRGLQDRGQNTQRPFFLNVVQAVSQEGACVYAVSDLRKSGEAAGY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8005_h06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001099782

ORF Size: 1662 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_001099782.2](#), [NP_001093252.1](#)

RefSeq Size: 2401 bp

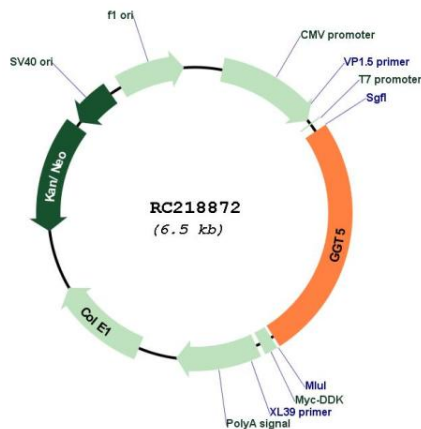
RefSeq ORF: 1665 bp

Locus ID: 2687

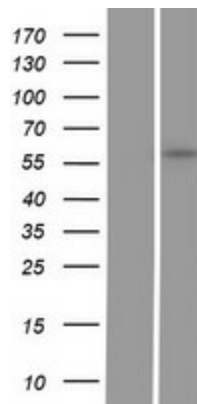
UniProt ID: [P36269](#)

Cytogenetics:	22q11.23
Protein Families:	Protease, Transmembrane
Protein Pathways:	Arachidonic acid metabolism, Cyanoamino acid metabolism, Glutathione metabolism, Metabolic pathways, Selenoamino acid metabolism, Taurine and hypotaurine metabolism
MW:	58.8 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 RC218872



Western blot validation of overexpression lysate (Cat# [LY420532]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218872 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).