OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG218872

GGT5 (NM_001099782) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GGT5 (NM_001099782) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GGT5
Synonyms:	GGL; GGT-REL; GGT 5; GGTLA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG218872 representing NM_001099782
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCCGGGGCTACGGGGCCACGGTCAGCCTAGTCCTGCTGGGTCTGGGGCTGGCGCTGGCTGTCATTG
TGCTGGCTGTGGTCCTCTCTCGACACCAGGCCCCATGTGGCCCCCAGGCCTTTGCCCACGCTGCTGTTGC
CGCCGACTCCAAGGTCTGCTCGGATATTGGACGAGCCATCCTCCAGCAGCAGGGCTCACCCGTGGATGCC
ACCATCGCGGCTCTGGTCTGCACCAGCGTCGTCAACCCTCAGAGCATGGGCCTGGGCGGAGGGGTCATCT
TCACCATCTACAATGTGACAACAGGGGCCCAGTGGATCGGGGTGCCCGGGGAGCTCCGTGGCTATGCCGA
GGCCCACCGCCGCCATGGCCGCCTGCCCTGGGCGCAGCTGTTCCAGCCCACCATCGCGCTGCTCCGAGGG
GGGCATGTGGTGGCCCCTGTCCTCAGCCGTTTCCTGCACAACAGCATCCTGCGGCCTTCCTTGCAGGCGT
CAACCCTGCGCCAGCTCTTCTTCAACGGGACAGAACCCCTGAGGCCTCAGGACCCACTCCCATGGCCTGC
ACTGGCCACCACCCTGGAGACCGTGGCCACAGAGGGCGTGGAGGTCTTCTACACGGGGAGGCTGGGCCAG
ATGCTGGTGGAGGACATTGCCAAGGAAGGGAGCCAGCTGACGCTGCAGGACCTGGCCAAGTTCCAGCCCG
AGGTGGTGGATGCCCTGGAGGTGCCCCTGGGGGACTATACCCTGTACTCACCACCGCCGCCTGCAGGGGG
TGCCATTCTCAGCTTTATCCTCAACGTGCTAAGAGGGTTCAACTTCTCAACAGAGTCTATGGCCAGGCCT
GAAGGGAGGGTGAACGTGTACCACCACCTTGTAGAGACGCTCAAGTTTGCCAAGGGGCAGAGGTGGAGGC
TGGGGGACCCTCGAAGCCACCCGAAGCTCCAGAATGCCTCCCGGGACCTGCTGGGGGAGACCCTGGCCCA
GCTCATCCGCCAACAGATCGATGGCCGGGGGGACCACCAGCTCAGCCACTACAGCTTGGCCGAGGCCTGG
GGCCACGGGACAGGCACGTCCCATGTGTCTGTGCTGGGGGAGGATGGCAGCGCCGTGGCTGCCACCAGCA
CCATCAACACACCCTTTGGAGCGATGGTGTATTCACCACGGACAGGCATCATCCTCAACAACGAGCTCCT
GGACTTATGCGAGCGATGCCCCCGGGGTTCCGGCACCACCCCCTCACCTGTGAGTGGAGACAGGGTGGGT
GGAGCTCCCGGAAGGTGCTGGCCCCCAGTTCCAGGCGAGCGTTCCCCATCCTCCATGGTGCCCTCCATCT
TGATCAACAAAGCCCAGGGGTCGAAGCTAGTGATTGGCGGGGCTGGCGGGGAGCTCATCATCTCTGCTGT
GGCCCAGGCCATCATGAGCAAGCTGTGGCTTGGCTTTGACCTGAGAGCGGCCATTGCAGCCCCCATCCTG
CATGTCAACAGCAAGGGCTGTGTGGAGTACGAGCCCAACTTCAGCCAGGAGGTGCAGAGGGGACTCCAAG
ACCGTGGCCAGAACCAGACCCAGAGGCCCTTCTTCCTGAACGTGGTCCAGGCTGTGTCCCAGGAGGGGGC
CTGTGTGTACGCCGTCTCGGACCTGAGGAAGAGTGGGGAGGCCGCAGGCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

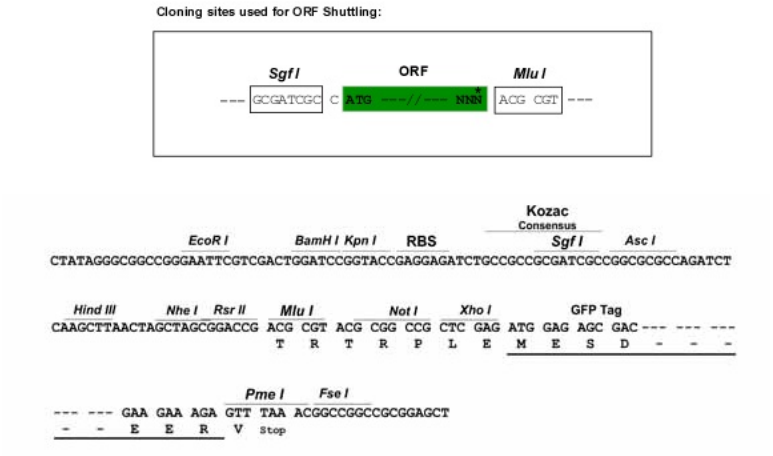
>RG218872 representing NM_001099782
Red=Cloning site Green=Tags(s)

MARGYGATVSLVLLGLGLALAVIVLAVVLSRHQAPCGPQAFAHAAVAADSKVCSDIGRAILQQQGSPVDA
TIAALVCTSVVNPQSMGLGGGVIFTIYNVTTGAQWIGVPGELRGYAEAHRRHGRLPWAQLFQPTIALLRG
GHVVAPVLSRFLHNSILRPSLQASTLRQLFFNGTEPLRPQDPLPWPALATTLETVATEGVEVFYTGRLGQ
MLVEDIAKEGSQLTLQDLAKFQPEVVDALEVPLGDYTLYSPPPPAGGAILSFILNVLRGFNFSTESMARP
EGRVNVYHHLVETLKFAKGQRWRLGDPRSHPKLQNASRDLLGETLAQLIRQQIDGRGDHQLSHYSLAEAW
GHGTGTSHVSVLGEDGSAVAATSTINTPFGAMVYSPRTGIILNNELLDLCERCPRGSGTTPSPVSGDRVG
GAPGRCWPPVPGERSPSSMVPSILINKAQGSKLVIGGAGGELIISAVAQAIMSKLWLGFDLRAAIAAPIL
HVNSKGCVEYEPNFSQEVQRGLQDRGQNQTQRPFFLNVVQAVSQEGACVYAVSDLRKSGEAAGY

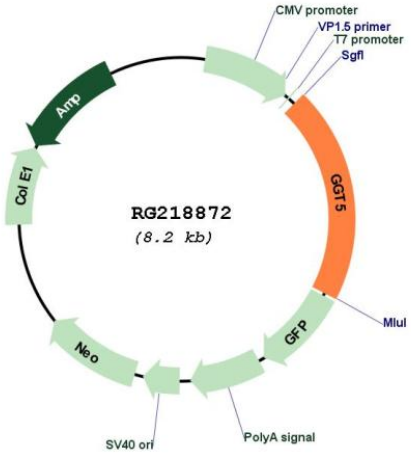
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



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
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]