

Product datasheet for **RG238929**

GGT1 (NM_001288833) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GGT1 (NM_001288833) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GGT1
Synonyms:	CD224; D22S672; D22S732; GGT; GGT 1; GGTD; GTG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238929 representing NM_001288833.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGAAGAAGAAGTTAGTGGTGTCTGGCCCTGTGGCCGTGGTCTCTGGTGTGGTCATTGTCCGGCTCTGT
CTCTGGTGCCTCAGCCTCCAAGGAACCTGACAACCATGTGTACACCAGGGCTGCCGTGGCCCGGAT
GCCAAGCAGTGTCTGAAGATTGGGAGGGATGCACTGCGGGACGGTGGCTCTGCGGTGGATGCAGCCATT
GCAGCCCTGTTGTGTGTGGGGCTCATGAATGCCACAGCATGGGCATCGGGGGTGGCCTCTTCTCACC
ATCTACAACAGCACACACGAAAAGCTGAGGTCATCAACGCCCGCAGGTGGCCCCAGGCTGGCCTTT
GCCACCATGTTCAACAGCTCGGAGCAGTCCCAGAAGGGGGGGTGTGGTGGCGGTGCCTGGGGAGATC
CGAGGCTATGAGCTGGCACACCAGCGCATGGCGGGTGCCTGGGCTCGCCTCTCCAGCCAGCATC
CAGCTGGCCCGCAGGGCTTCCCGTGGCAAGGGCTTGGCGGCAGCCCTGGAAAACAAGCGGACCGTC
ATCGAGCAGCAGCTGTCTTGTGTGAGGTGTTCTGCCGGATAGAAGGTGCTTCGGGAGGGGGAGAGA
CTGACCCTGCCGAGCTGGCTGACACCTACGAGACGCTGGCCATCGAGGGTGCCAGGCCTTCTACAAC
GGCAGCCTCACGCCCAGATTGTGAAGGACATCCAGGCGCCGGGGCATTGTGACAGCTGAGGACCTG
AACTACTACCGTGTGAGCTGATCGAGCACCCGCTGAACATCAGCCTGGGAGACGTGGTGTGTACATG
CCCAGTGCGCCGCTCAGCGGGCCGTGCTGGCCCTCATCTCAACATCCTCAAAGGTACAACCTTCTCC
CGGGAGAGCGTGGAGAGCCCCGAGCAGAAGGGCCTGACGTACCACCGCATCGTAGAGGCTTTCGGTTT
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ACCTCCGAGTTCCTCGTGCCAGCTCCGGGCCAGATCTCTGACGACACCACTACCCGATCTCTTAC
TACAAGCCCGAGTCTACACGCCGATGACGGGGCAGTGTCTCACCTGTCTGTGCGCAGAGACGGC
AGTGTGTGTCCGCCACCAGCACCATCAACCTCTACTTTGGCTCCAAGGTCCGCTCCCGGTCAGCGGG
ATCTCTGTTCAATAATGAATGGAGCACTTCAGCTCTCCAGCATACCAACGAGTTTGGGGTACCCCCC
TCACTGCCAATTTATCCAGCCAGGAAGCAGCCGCTCTCGTCCATGTGCCCGACGATCATGGTGGGC
CAGGACGGCCAGGTCGGATGGTGGTGGGAGCTGCTGGGGGCACACAGATCACCACGGCCACTGCACTG
GCCATCATCTACAACCTCTGGTTCGGCTATGACGTGAAGCGGGCCGTGGAGGAGCCCCGGCTGCACAAC
CAGCTTCTGCCAACGTACGACAGTGGAGAGAAACATTGACCAGGCAGTACTGCAGCCCTGGAGACC
CGGCACCATCACCCAGATCGCGTCCACCTTCATCGTGTGGTGAAGCCATCGTCCGCACGGCTGGT
GGCTGGGACGCTGCTCGGACTCCAGAAAGCGGGGAGCCTGCCGGCTAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence:

>Peptide sequence encoded by RG238929
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MKKKLVLVLLAVVLVLLVIVGLCLWLPASKEPDNHVYTRAAVAADAKQCSKIGRDALRDGGSVDAAI
AALLCVGLMNAHSMGIGGLFLTIYNSTTRKAEVINAREVAPRLAFATMFSSEQSQKGLSVAVPGEI
RGYELAHQRHGRPLPWARLFQPSIQLARQGFVPGKGLAAALENKRTVIEQQPVLCEVFCRDRKVLREGER
LTLPLADTYETLAIEGAQAFYNGSLTAQIVKDIQAAGGIVTAEDLNNYRAELIEHPLNISLGDVLYM
PSAPLSGPVLAALILNILKGYNFSRESVESPEQGLTYHRIVEAFRFAYAKRLLGDPKFDVDTVEVRNM
TSEFFAAQLRAQISDDTTHPISYKPEFYTPDDGGTAHL SVVAEDGS AVSATSTINLYFGSKVRSPVSG
ILFNEMDDFSSPSITNEFGVPPSPANFIQPGKQPLSSMCPTIMVGQDQVRMVGAAGGTQITTAL
AIIYNLWFGYDVKRAVEEPRLNQLPNVTTVERNIDQAVTAALETRHHHTQIASTFIAVQAIVRTAG
GWAASDSRKGEPAGY
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPE
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites:

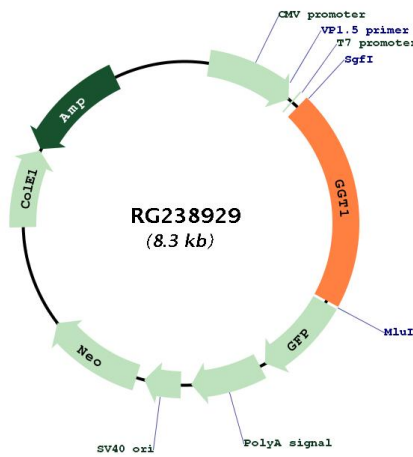
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001288833

ORF Size: 1707 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).
RefSeq:	NM_001288833.2
RefSeq Size:	2693 bp
RefSeq ORF:	1710 bp
Locus ID:	2678
UniProt ID:	P19440
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:	61.4 kDa
Gene Summary:	The enzyme encoded by this gene is a type I gamma-glutamyltransferase that catalyzes the transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors. The enzyme is composed of a heavy chain and a light chain, which are derived from a single precursor protein. It is expressed in tissues involved in absorption and secretion and may contribute to the etiology of diabetes and other metabolic disorders. Multiple alternatively spliced variants have been identified. There are a number of related genes present on chromosomes 20 and 22, and putative pseudogenes for this gene on chromosomes 2, 13, and 22. [provided by RefSeq, Jan 2014]