

Product datasheet for **MR208958**

Ggt1 (NM_008116) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ggt1 (NM_008116) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ggt1
Synonyms:	CD224; dwg; GGT; GGT-1; GGT 1; Ggtp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208958 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGAATCGGTTTCTGGTCTGGCCTGGTGGCTGTGGTTCTGGTATTTGTCATCATCGGCCTCTGTA
 TCTGGTTGCCCTACACCTCTGGGAAGCCCGACACGTGTACTCCAGGGCGCGGTGGCCACCGACGCCAA
 GCGCTGCTCAGAGATTGGACGGATATCTACAGGAAGTGTTCCGTGGTGGATGCAGCCATCGCAAGC
 CTGCTGTGTATGGGGCTCATGAATGCCACAGTATGGGCATCGGGGGCGGCCTGTTCTTACCATCTACA
 ACAGCACCACAGGAAAAGTTGAGGTTATCAATGCCCGTGAGGTAGCTCCCAGGTTGGCCAATACCACCAT
 GTTCAACAACCTCAAGGACTCTGAAGAAGTGGCCTTTCAGTGGCTGTCCCTGGTAAATCCGTGGTTAT
 GAGCTGGCACACCAACGACACGGCCGGCTCCCCTGGGCTCGCCTTCCAACCCAGCATCCAGCTGGCTC
 GCCACGGCTTCCCTGTGGCAAGGGTTTGGCAATAGCCCTGGACAAAAACGGGACGTATTGAGAAGAC
 CCCTGCCTTGTGGGAGGTGTTCTGCCGCCAAGGAAGGTCTTCAAGAAGGAGAGACGGTACTATGCCG
 AAGCTGGCTGACACATTGCAGATACTGGCCAGGAGGGCCCAAGGCCTTCTACAATGGGAGCCTCACAG
 CCCAGATTGTAAAGACATCCAGGAGGCTGGTGGCATTATGACGGTTGAGGACCTCAACAACCTACCGTGC
 TGAGCTGATTGAGCATCCGATGAGCATCGGCCTCGGTGATGCGACCTGTACGTGCCAGTGCCCCACTC
 AGCGGGCCCGTGCTGATTCTCATCTTGAACATCTCAAAGGATACAACCTCTCTCCGAAGAGCGTAGCGA
 CCCCTGAACAGAAGGCACTGACGTATCACCGTATCGTGGAGGCCCTTTCGGTTTGCCTATGCCAAGAGGAC
 CATGCTCGGTGACCCAAAGTTTGTGATGTGTCTCAGGTGATCCGCAACATGAGCTCTGAGTTCTACGCC
 ACCCAGCTCCGAGCCGCATCACTGATGAAACACCCACCCAGCCGCTACTATGAGCCTGAATTTCTACC
 TTCAGGATGATGGAGCACCGCTACCTGTCTCGGTTTCAGAGGATGGCAGTGTGGTGGCTGCCACTAG
 TACCATCAACCTCTACTTTGGCTCCAAGTCTGTCTCGGGTCAGTGGCATCCTGTTAATGATGAGATG
 GATGACTTCAGCTCGCCAACTTCATCAACCAGTTCAGGGTAGCCCTCACAGCCAACCTCATCAAGC
 CAGGTAAGCAGCCTCTTTCATCCATGTGTCCCTCAATCATCCTGGATAAGGACGGCCAGGTTGCGATGGT
 GGTGCGGAGCCTCAGGGGTACCCAGATCACACATCTGTTGCACTGGCCATCATCAACAGCCTGTGGTTC
 GGATACGATGTGAAGAGAGCTGTGGAGGAGCCCGGCTGCACAACCAGCTTTTACCTAATACCACAACGG
 TAGAGAAAAGACATTGATCAGGTGGTACTGCAGGCCTGAAGATTCGGCACCACCATACAGAAGTCACGCC
 CACCTTCATCGCTGTAGTTCAGGCTGTCGTTGAGCATCAGGTGGTTGGGAGCTGCCTCAGACTCCAGA
 AAAGCGGGGAACCTGCTGGCTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208958 protein sequence
 Red=Cloning site Green=Tags(s)

MKNRFLVGLVAVVLFVVIIGLCIWLPTYSGKPDHVYSRAAVATDAKRCSEIGRDILQEGGSVVDAAIAS
 LLCMLMNAHSMGIGGLFFTIYNSTTGKVEVINAREVAPRLANTTMFNNSKDSEEGGLSVAVPGEIRGY
 ELAQHRHRLPWARLFQPSIQLARHGFPVKGGLAIALDKKRDVIEKTPALCEVFCRQGVKLVQEGETVTMP
 KLADTLQILAQEGAKAFYNGSLTAQIVKDIQEAGGIMTVEDLNYYRAELIEHPMSIGLDATLYVPSAPL
 SGPVLIILNILKGYNFSKSVATPEQKALTYHRIVEAFRFAYAKRTMLGDPKFDVVSQVIRNMSSEFYA
 TQLRARITDETHPAAYEPEFYLDQDGGTAHLSAVSEDSAVAATSTINLYFGSKVLSRVSGILFNDEM
 DDFSSPNFINQFRVAPSPANFIKPGKQPLSSMCPSSIILDKDGQVRMVVVGASGGTQITTSVALAIINSLWF
 GYDVKRAVEEPRLHNQLLPNTTVEKDIDQVVTAGLIRHHHTEVPTFIAVVQAVVRASGGWAAASDSR
 KGGEPAGY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_008116

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).

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_008116.3](#)

RefSeq Size: 2022 bp

RefSeq ORF: 1707 bp

Locus ID: 14598

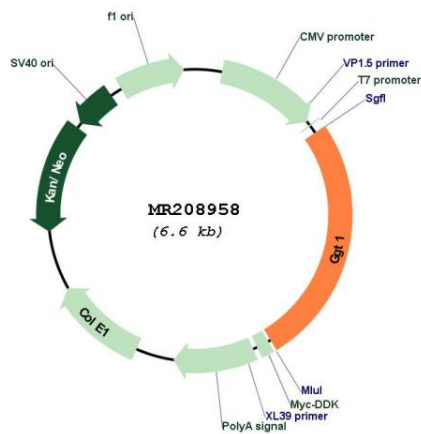
UniProt ID: [Q60928](#)

Cytogenetics: 10 C1

MW: 61.6 kDa

Gene Summary: This gene encodes gamma-glutamyl transpeptidase, a plasmamembrane-associated enzyme that cleaves the peptide bond between gamma-glutamyl and cysteinyl glycine moieties of glutathione. The encoded protein is autocatalytically processed to generate an enzymatically active heterodimer comprised of heavy and light chains. Mice lacking the encoded protein grow slowly, develop cataracts and have elevated levels of glutathione in plasma and urine. Transgenic overexpression of the encoded protein in mice enhances osteoclastic bone resorption. The mutant alleles termed 'Dwarf grey' and 'Dwarf grey Bayer' in mice are associated with deletions in this gene. A gamma-glutamyl transpeptidase paralog is located adjacent to this gene. Alternative splicing results in multiple transcript variants. Additional transcripts using alternate promoters and differing in 5' UTRs have been described. [provided by RefSeq, Apr 2015]

Product images:



Circular map for MR208958