

Product datasheet for **RG234666**

Galactosylceramidase (GALC) (NM_001201401) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Galactosylceramidase (GALC) (NM_001201401) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Galactosylceramidase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG234666 representing NM_001201401
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGAGTGGCTACTCTCGGCTTCTGGCAACGCCAGCGAAAGCTATGACTGCGGCCGCGGGTTCGG
CGGGCCGCGCCGGTGCCTTGTCTGTGTGCGCTGCTGGCGCCCGCGGCGGTACGTGCTCGACGA
CTCCGACGGGCTGGGCCGGGAGTTCGACGGCATCGGCGCGGTACGCGCGCGGGCCGAATTTTGGTGCC
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TGCATTATGCACTAGATGAGAATATTTCCGAGGATACGAGTGGTGGTATGAAAGAAGCTAAGAAGAG
GAATCCCAATATTACACTCATTGGGTGCCATGGTCATCCCTGGATGGCTGGGAAAAGTTTCGACTGG
CCTTATGTCAATCTTCAGCTGACTGCCTATTATGTCGTGACCTGGATTGTGGCGCCAAGCGTTACCATG
ATTTGGACATTGATTATTTGGAATTTGGAATGAGAGGTCATATAATGCCAATTATTAAGATATTAAG
AAAAATGCTGAATTATCAAGGTCTCCAGCGAGTAAAATCATAGCAAGTGATAATCTCTGGGAGTCCATC
TCTGCATCCATGCTCCTTGATGCCGAACCTTCAAGGTGGTGTGTTATAGGGGCTCATTATCCTGGAA
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TAGTGACATGGGTGCAGGCTGCTGGGTGCGATTTTAAATCAGAATTATATCAATGGCTATATGACTTCC
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TACTCAACCTGGCTGGTATTACCTGAAGACAGTTGGCCATTTAGAGAAAGGAGGAAGCTACGTAGCTCTG
ACTGATGGCTTAGGGAACCTCACCATCATCATTGAAACCATGAGTCATAAACATTCTAAGTGCATACGGC
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GACCCATTACGTGGGCTGCCGATGCATCCAACACAATCAGTATTATAGGAGACTACAAGTGGACCAATCT
GACTATAAAGTGTGATGTATACATAGAGACCCCTGACACAGGAGGTGTGTTTCATTGCAGGAAGGTAAT
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TTACAGGTGATTTAGCTGGATGGATTATATATGCTTTAGGACGTGTTGAAGTTACAGCAAAAAAATGGTA
TACACTCAGTTAACTATTAAGGGTCATTTACCTCTGGCATGCTGAATGACAAGTCTCTGTGGACAGAC
ATCCCTGTGAATTTTCAAAGAATGGCTGGGCTGCAATTGGAACCTCACTCCTTTGAATTTGCACAGTTTG
ACAACCTTCTTGTGGAAGCCACACGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG234666 representing NM_001201401
Red=Cloning site Green=Tags(s)

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MAEWLLSASWQRRAKAMTAAAGSAGRAAVPLLLCALLAPGGAYVLDDSDGLGREFDGIGAVSGGGPNFGA
SLHILKVEIGDGQTTDGTPEPSHMHYALDENYFRGYEWLWKEAKKRNPNTLIGLPWSFPGWLKGFWDW
PYVNLQLTAYYVVTWIVGAKRYHDLDDIDYIGIWNERSYNYIKILRKMLNYQGLQRVKIIASDNLWESI
SASMLLDAELFKVVDVIGAHYPGTHSAKDAKLTGKKLWSEDFSTLNSDMGAGCWGRILNQNYINGYMTS
TIAWNLVASYEQLPYGRCLMTAQEPWSGHYVVEPVVWVSAHTTQFTQPGWYYLKTGVHLEKGGSYVAL
TDGLGNLTIIETMSHKHSCIRPFLPYFNVSQQFATFVLKGSFSEIPELQVWYTKLGKTSERFLFKQLD
SLWLLDSDGSFTLSLHEDELFTLTTLTTGRKGSYPLPPKSQFPSTYKDDFNVDYPFFSEAPNFADQTGV
FEYFTNIEDPGEHHFTLRQVLNQRPIITWAADASNTISIIIGDYNWNTLTIKCDVYIETPDTGGVFIAGRNV
KGGILIRSARGIFFWIFANGSYRVTDGLAGWIIYALGRVEVTAKKWYTLTLTIKGHFTSGLMNDKSLWTD
IPVNFPKNGWAAIGTHSFEFAQFDNFLVEATR
    
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001201401

ORF Size: 1986 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_001201401.1](#), [NP_001188330.1](#)

RefSeq Size: 3828 bp

RefSeq ORF: 1989 bp

Locus ID: 2581

UniProt ID: [P54803](#)

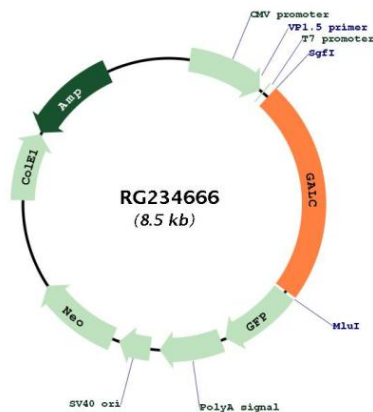
Cytogenetics: 14q31.3

Protein Families: Druggable Genome

Protein Pathways: Lysosome, Metabolic pathways, Sphingolipid metabolism

Gene Summary: This gene encodes a lysosomal protein which hydrolyzes the galactose ester bonds of galactosylceramide, galactosylsphingosine, lactosylceramide, and monogalactosyldiglyceride. Mutations in this gene have been associated with Krabbe disease, also known as globoid cell leukodystrophy. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG234666