

Product datasheet for **RC234663**

Galactosylceramidase (GALC) (NM_001201402) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Galactosylceramidase (GALC) (NM_001201402) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Galactosylceramidase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC234663 representing NM_001201402
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGGAAGACCCATGGTAGGGCCACTCATGGCCCTCTTCCTTTGGCGGACCTTGGAAATCCACCTTC
 CCTGCGTTAAAGTGCTCCACCAGGTGACGCCGGAAGAGAAGCCAGCAGCAACCTCCGACTTCTAGTAAA
 TTACCCAGAGCCCTATCGTTCTCAGATATTGGATTATCTCTTTAAGCCGAATTTTGGTGCCTCTTTGCAT
 ATTTTAAAGTGGAATAGGTGGTATGGGCGAGACAACAGACGGCACTGAGCCCTCCACATGCATTATG
 CACTAGATGAGAATTATTTCCGAGGATACGAGTGGTGGTGGTATGAAAGAAGCTAAGAAGAGGAATCCCAA
 TATTACACTCATTGGGTTGCCATGGTCAATCCCTGGATGGCTGGGAAAAGGTTTCGACTGGCCTTATGTC
 AATCTTCAGCTGACTGCCTATTATGTCGTGACCTGGATTGTGGCGCCAAGCGTTACCATGATTTGGACA
 TTGATTATATTGGAATTTGGAATGAGAGGTCATATAATGCCAATTATATTAAGATATTAAGAAAAATGCT
 GAATTATCAAGGTCTCCAGCGAGTGAAAATCATAGCAAGTGATAATCTCTGGGAGTCCATCTCTGCATCC
 ATGCTCCTTGATGCCGAACCTCTCAAGGTGGTGGTATGTTATAGGGGCTCATTATCCTGGAACCCATTGAG
 CAAAAGATGCAAAGTTGACTGGGAAAGACTTTGGTCTTCTGAAGACTTTAGCACTTTAAATAGTGACAT
 GGGTGCAGGCTGCTGGGGTGCATTTTAAATCAGAATTATATCAATGGCTATATGACTTCCACAATCGCA
 TGGAAATTTAGTGGCTAGTTACTATGAACAGTTGCCTTATGGGAGATGCGGGTTGATGACGGCCAGGAGC
 CATGGAGTGGGCACTACGTGGTGAATCTCCTGTCTGGGTATCAGCTCATACCACTCAGTTTACTCAACC
 TGGCTGGTATTACCTGAAGACAGTTGGCCATTTAGAGAAAAGGAGGAAGCTACGTAGCTCTGACTGATGGC
 TTAGGGAACCTCACCATCATCATTGAAACCATGAGTCATAAACATTCTAAGTGCATACGGCCATTTCTTC
 CTTATTTCAATGTGTACAACAATTTGCCACCTTTGTTCTTAAGGGATCTTTTAGTGAAATACCAGAGCT
 ACAGGTATGGTATACCAAACCTTGAAAAACATCCGAAAGATTTCTTTTTAAGCAGCTGGATTCTCTATGG
 CTCTTGACAGCGATGGCAGTTTCACTGAGCCTGCATGAAGATGAGCTGTTCACTCACTCACCACTCTCA
 CCACTGGTGCAAAGGCAGCTACCCGCTTCTCCAAAATCCAGCCCTTCCCAAGTACCTATAAGGATGA
 TTTCAATGTTGATTACCCATTTTTTAGTGAAGCTCCAACTTTGCTGATCAAACCTGGTGTATTTGAATAT
 TTTACAAATATTGAAGACCCTGGCGAGCATCACTTACGCTACGCCAAGTTCTCAACCAGAGACCCATTA
 CGTGGGCTGCCGATGCATCCAACACAATCAGTATTATAGGAGACTACAACCTGGACCAATCTGACTATAAA
 GTGTGATGTATACATAGAGACCCCTGACACAGGAGGTGTGTTTATTGCAGGAAGAGTAAATAAAGGTGGT
 ATTTTATTAGAAGTCCAGAGGAATTTCTTCTGGATTTTGCAAATGGATCTTACAGGGTTACAGGTG
 ATTTAGCTGGATGGATTATATGCTTTAGGACGTGTTGAAGTTACAGCAAAAAAATGGTATACACTCAC
 GTTAACTATTAAGGGTCAATTCACCTCTGGCATGCTGAATGACAAGTCTCTGTGGACAGACATCCCTGTG
 AATTTTCAAAGAATGGCTGGGCTGCAATTGGAACCTCACTCCTTTGAATTTGCACAGTTTGCACAACTTC
 TTGTGGAAGCCACACGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234663 representing NM_001201402
Red=Cloning site Green=Tags(s)

```

MLGKSHGRATHGPLPLADLGIHLPCVKVLHQVTPPEKPAATSRLLVNYPEPYRSQILDYLFKPNFGASLH
ILKVEIGDGGQTTDGTPEPSHMHYALDENYFRGYEWLWLMKEAKKRNPNITLIGLPWSFPGWLGKGFDPYV
NLQLTAYYVVTWIVGAKRYHDLIDYIGIWNERSYNANYIKILRKMLNYQGLQRVKIIASDNLWESISAS
MLLDAELFKVVDVIGAHYPGTHSAKDAKLTKKLLWSEDFSTLNSDMGAGCWGRILNQYINGYMTSTIA
WNLVASYYEQLPYGRCLMTAQEPWSGHYVVEPVVSAHTTQFTQPGWYYLKTGVHLEKGSYVALTDG
LGNLTIIIEETMSHKHSCIRPFLPYFNVSQQFATFVLKGSFSEIPELQVWYTKLGTSERFLFKQLDSLW
LLDSDGSFTLSLHEDELFTLTTLTTGRKGSYPLPPKSQPFSTYKDDFNVDYPPFSEAPNFADQTVFEY
FTNIEDPGEHHFTLRQVLNQRPIWAADASNTISIIIGDYNWNTLTIKCDVYIETPDTGGVF IAGRVNKG
ILIRSARGIFFWIFANGSYRVTGDLAGWIIYALGRVEVTAKKWYTLTLTIKGHFTSGMLNDKSLWTDIPV
NFPKNGWAAIGTHSFEFAQFDNFLVEATR
    
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001201402

ORF Size: 1977 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_001201402.1](#), [NP_001188331.1](#)

RefSeq Size: 3878 bp

RefSeq ORF: 1980 bp

Locus ID: 2581

UniProt ID: [P54803](#)

Cytogenetics: 14q31.3

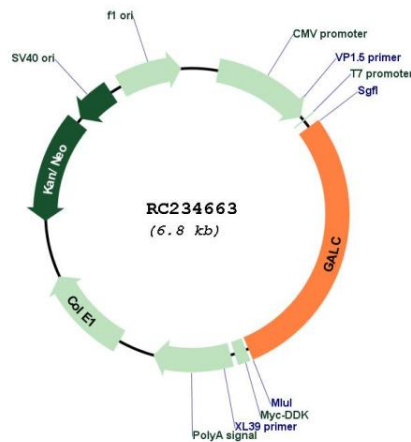
Protein Families: Druggable Genome

Protein Pathways: Lysosome, Metabolic pathways, Sphingolipid metabolism

MW: 75.2 kDa

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 RC234663