

## Product datasheet for **RC211630**

### Galactosylceramidase (GALC) (NM\_001037525) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Galactosylceramidase (GALC) (NM_001037525) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Galactosylceramidase
Synonyms:	galactocerebrosidase; galactocerebroside beta-galactosidase; galactosylceramidase; galactosylceramide beta-galactosidase; galactosylceraminidase; GALCERase; OTTHUMP00000027906
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC211630 representing NM\_001037525  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCTGAGTGGCTACTCTCGGCTTCTGGCAACGCCAGCGAAAGCTATGACTGCGGCCGCGGGTTCGG  
CGGGCCGCGCGCGGTGCCCTTGCTGCTGTGTGCGCTGCTGGCGCCCGCGGCGGTACGTGCTCGACGA  
CTCCGACGGGCTGGGCCGGGAGTTCGACGGCATCGGCGCGGTACGCGCGCGGGCAACCTCCCGACTT  
CTAGTAAATTACCCAGAGCCCTATCGTTCTCAGATATTGGATTATCTCTTTAAGCCGAATTTTGGTGCCT  
CTTTGCATATTTTAAAAGTGGAAATAGGTGGTGTGGGCAGACAACAGACGGCACTGAGCCCTCCACAT  
GCATTATGCACTAGATGAGAATTATTTCCGAGGATACGAGTGGTGGTTGATGAAAGAAGCTAAGAAGAGG  
AATCCCAATATTACACTCATTGGGTTGCCATGGTCATTCCCTGGATGGCTGGGAAAAGGTTTCGACTGGC  
CTTATGTCAATCTTCAGCTGACTGCCTATTATGTCGTGACCTGGATTGTGGGCGCAAGCGTTACCATGA  
TTTGGACATTGATTATATTGGAATTTGGAATGAGAGGTCATATAATGCCAATTATATTAAGATATTAAGA  
AAAATGCTGAATTATCAAGGTCTCCAGCGAGTGAAAATCATAGCAAGTGATAATCTCTGGGAGTCCATCT  
CTGCATCCATGCTCCTTGATGCCGAACCTTCAAGGTGGTTGATGTTATAGGGGCTCATTATCCTGGAAC  
CCATTCAGCAAAAAGATGCAAAGTTGACTGGGAAGAAGCTTTGGTCTTCTGAAGACTTTAGCACTTTAAAT  
AGTGACATGGGTGCAGGCTGCTGGGTCGCATTTAAATCAGAATTATATCAATGGCTATATGACTTCCA  
CAATCGCATGGAATTTAGTGGCTAGTACTATGAACAGTTGCCTTATGGGAGATGCGGGTTGATGACGGC  
CCAGGAGCCATGGAGTGGCACTACGTGGTAGAATCTCCTGTCTGGGTATCAGCTCATACCACTCAGTTT  
ACTCAACCTGGCTGGTATTACCTGAAGACAGTTGGCCATTTAGAGAAAAGGAGGAAGCTACGTAGCTCTGA  
CTGATGGCTTAGGGAACCTCACCATCATCATTGAAACCATGGTAACTTTTGTGTTGCTATTGGATTA  
CTCACTTCTTACTATTGGAAAAATAAAATA

ACGCGTACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

## Protein Sequence:

>RC211630 representing NM\_001037525  
Red=Cloning site Green=Tags(s)

MAEWLLSASWQRRAKAMTAAAGSAGRAAVPLLLCALLAPGGAYVLDDSDGLGREFDGIGAVSGGGATSRL  
LVNYPEPYRSQILDYLFKPNFGASLHILKVEIGGDGQTTDGTPEPshmHYALDENYFRGYEWLMKEAKKR  
NPNIITLIGLPWSFPGWLKGFDPYVNLQLTAYYVVTWIVGAKRYHDLIDYIGIWNERSYNANYIKILR  
KMLNYQGLQRVKIIASDNLWESISASMLLDAELFKVVDVIGAHYPGTHSAKDAKLTGKKLWSEDFSTLN  
SDMGAGCWGRILNQNYINGYMTSTIAWNLVASYEQLPYGRCGLMTAQEPWSGHYVVESPVWVSAHTTQF  
TQPGWYYLKTGVHLEKGGSYVALTDGLGNLTIIETMVNFCCCYWINSLLYYWKNKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

## Chromatograms:

[https://cdn.origene.com/chromatograms/mk8057\\_g11.zip](https://cdn.origene.com/chromatograms/mk8057_g11.zip)

## Restriction Sites:

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001037525

**ORF Size:** 1221 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\\_001037525.2](#), [NP\\_001032614.1](#)

**RefSeq Size:** 1640 bp

**RefSeq ORF:** 1223 bp

**Locus ID:** 2581

**Cytogenetics:** 14q31.3

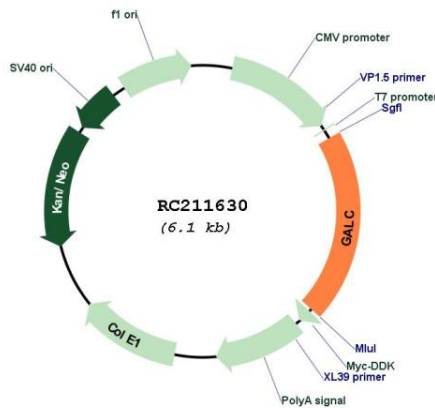
**Protein Families:** Druggable Genome

**Protein Pathways:** Lysosome, Metabolic pathways, Sphingolipid metabolism

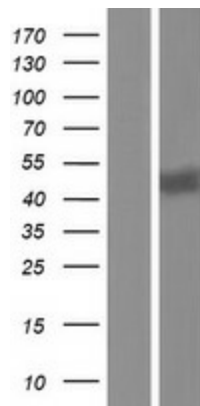
**MW:** 45.73 kDa

**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 RC211630



Western blot validation of overexpression lysate (Cat# [LY421917]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211630 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).