

Product datasheet for **RG211630**

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:	TurboGFP
Symbol:	GALC
Synonyms:	galactocerebrosidase; galactocerebroside beta-galactosidase; galactosylceramidase; galactosylceramide beta-galactosidase; galactosylceraminidase; GALCERase; OTTHUMP00000027906
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG211630 representing NM_001037525
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCTGAGTGGCTACTCTCGGCTTCTGGCAACGCCAGCGAAAGCTATGACTGCGGCCGCGGGTTCGG
 CGGGCCGCGCGCGGTGCCCTTGTCTGTGTGCGCTGCTGGCGCCCGCGGCGGTACGTGCTCGACGA
 CTTCCGACGGGCTGGGCCGGGAGTTCGACGCGCATCGGCGCGGTACGCGCGCGGGCAACCTCCCGACTT
 CTAGTAAATTACCCAGAGCCCTATCGTTCTCAGATATTGGATTATCTCTTTAAGCCGAATTTTGGTGCCT
 CTTTGCATATTTTAAAAGTGGAAATAGGTGGTATGGGCAGACAACAGACGGCACTGAGCCCTCCACAT
 GCATTATGCACTAGATGAGAATTATTTCCGAGGATACGAGTGGTGGTTGATGAAAGAAGCTAAGAAGAGG
 AATCCCAATATTACACTCATTGGGTTGCCATGGTCATTCCCTGGATGGCTGGGAAAAGGTTTCGACTGGC
 CTTATGTCAATCTTCAGCTGACTGCCTATTATGTCGTGACCTGGATTGTGGGCGCCAAGCGTTACCATGA
 TTTGGACATTGATTATATTGGAATTTGGAATGAGAGGTCATATAATGCCAATTATATTAAGATATTAAGA
 AAAATGCTGAATTATCAAGGTCTCCAGCGAGTGAAAATCATAGCAAGTGATAATCTCTGGGAGTCCATCT
 CTGCATCCATGCTCCTTATGCGCAACTCTCAAGGTGGTTGATGTTATAGGGGCTCATTATCCTGGAAC
 CCATTCAGCAAAAGATGCAAAGTTGACTGGGAAGAAGCTTTGGTCTTCTGAAGACTTTAGCACTTTAAAT
 AGTGACATGGGTGCAGGCTGCTGGGTCGCATTTAAATCAGAATTATATCAATGGCTATATGACTTCCA
 CAATCGCATGGAATTTAGTGGCTAGTACTATGAACAGTTGCCTTATGGGAGATGCGGGTTGATGACGGC
 CCAGGAGCCATGGAGTGGCACTACGTGGTAGAATCTCCTGTCTGGGTATCAGCTCATACCACTCAGTTT
 ACTCAACCTGGCTGGTATTACCTGAAGACAGTTGGCCATTTAGAGAAAAGGAGGAAGCTACGTAGCTCTGA
 CTGATGGCTTAGGGAACCTCACCATCATCATTGAAACCATGGTAAACTTTTGTGTTGCTATTGGATTAA
 CTCACCTCTTACTATTGGAAAAATAAAATA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG211630 representing NM_001037525
 Red=Cloning site Green=Tags(s)

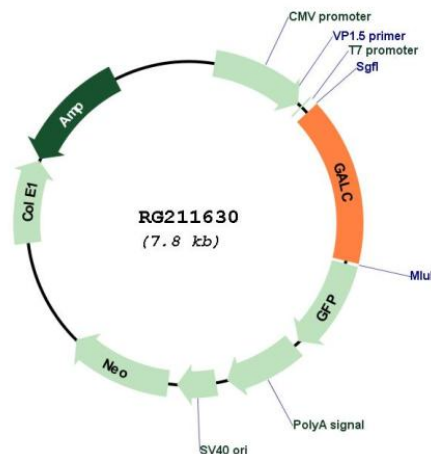
MAEWLLSASWQRRAKAMTAAAGSAGRAAVPLLLCALLAPGGAYVLDDSDGLGREFDGIGAVSGGGATSRL
 LVNYPEPYRSQILDYLFKPNFGASLHILKVEIGGDGQTTDGETPSHMHYALDENYFRGYEWLMKEAKKR
 NPNIITLIGLPWSFPGWLKGFDPYVNLQLTAYYVVTWIVGAKRYHDLIDIDYIGIWNERSYNANYIKILR
 KMLNYQGLQRVKIIASDNLWESISASMLLDAELFKVVDVIGAHYPGTHSAKDAKLTGKKLWSEDFSTLN
 SDMGAGCWGRILNQNYINGYMTSTIAWNLVASYEQLPYGRCGLMTAQEPWSGHYVVEPVVWSAHTTQF
 TQPGWYYLKTGVHLEKGGSYVALTDGLGNLTIIETMVNFCCCYWINSLLYYWKNKI

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


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:	<ol style="list-style-type: none">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:	<u>NM_001037525.2, NP_001032614.1</u>
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
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]