

Product datasheet for **RC211578**

Galactosylceramidase (GALC) (NM_000153) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Galactosylceramidase (GALC) (NM_000153) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Galactosylceramidase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC211578 representing NM_000153
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGCTGAGTGGCTACTCTCGGCTTCTGGCAACGCCGAGCGAAAGCTATGACTGCGGCCGCGGGTTCGG
CGGGCCGCGCGCGGTGCCCTTGCTGCTGTGTGCGCTGCTGGCGCCCGCGGCGCGTACGTGCTCGACGA
CTCCGACGGGCTGGGCCGGGAGTTCGACGGCATCGGCGCGGTGAGCGCGCGGGGCAACCTCCCGACTT
CTAGTAAATTACCCAGAGCCCTATCGTTCTCAGATATTGGATTATCTCTTTAAGCCGAATTTTGGTGCTT
CTTTGCATATTTTAAAAGTGGAAATAGGTGGTGTGGGCAGACAACAGACGGCACTGAGCCCTCCACAT
GCATTATGCACTAGATGAGAATTATTTCCGAGGATACGAGTGGTGGTGTGAAAGAAGCTAAGAAGAGG
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CTTATGTCAATCTTCAGCTGACTGCCTATTATGTCGTGACCTGGATTGTGGGCGCAAGCGTTACCATGA
TTTGGACATTGATTATATTGGAATTTGGAATGAGAGGTGATATAATGCCAATTATATTAAGATATTAAGA
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CTGCATCCATGCTCCTTGATGCCGAACCTTCAAGGTGGTGTGATTATAGGGGCTCATTATCCTGGAAC
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ATTTCTTCTTATTTCAATGTGTCACAACAATTTGCCACCTTTGTTCTTAAGGGATCTTTTAGTGAATA
CCAGAGCTACAGGTATGGTATACCAAACCTTGAAAAACATCCGAAAGATTTCTTTTAAAGCAGCTGGATT
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ACACTCACGTTAACTATTAAGGGTCATTTACCTCTGGCATGCTGAATGACAAGTCTCTGTGGACAGACA
TCCCTGTGAATTTTCAAAGAATGGCTGGGCTGCAATTGGAACCTCACTCCTTTGAATTTGCACAGTTTGA
CAACTTCTTGTGGAAGCCACACGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211578 representing NM_000153
Red=Cloning site Green=Tags(s)

MAEWLLSASWQRRAKAMTAAAGSAGRAAVPLLLCALLAPGGAYVLDDSDGLGREFDGIGAVSGGGATSRL
 LVNYPEPYRSQILDYLFKPNFGASLHILKVEIGGDGQTTDGTETPSHMHYALDENYFRGYEWWLMKEAKKR
 NPNIITLIGLPWSFPGWLKGFDPYVNLQLTAYYVVTWIVGAKRYHDLIDYIGIWNERSYNANYIKILR
 KMLNYQGLQRVKIIASDNLWESISASMLLDAELFKVVDVIGAHYPGTHSAKDAKLTKKKLWSEDFSTLN
 SDMGAGCWGRILNQNYINGYMTSTIAWNLVASYEQLPYGRCLMTAQEPWSGHYVVESPVWVSAHTTQF
 TQPGWYYLKTGVHLEKGGSYVALTDGLGNLTIIETMSHKHSCIRPFLPYFNVSQQFATFVLKGSFSEI
 PELQVWYTKLGKTSERFLFKQLDSLWLLSDGSFTLSLHEDELFTLTTLTTGRKGSYPLPKSQPFSTY
 KDDFNVDYPFFSEAPNFADQTVFEYFTNIEDPGEHHFTLRQVLNQRPIITWAADASNTISIIIGDYNWNL
 TIKCDVYIETPDTGGVF IAGRVNKGIL IRSARGIFFWIFANGSYRVTGDLAGWIIYALGRVEVTAKKWY
 TLTITIKGHFTSGMLNDKSLWTDIPVNFKNGWAAIGTHSFEFAQFDNFLVEATR

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8025_a07.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

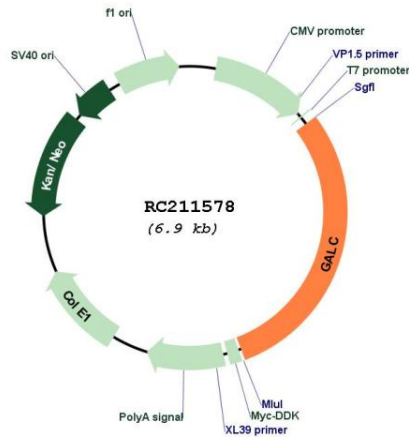


ACCN: NM_000153

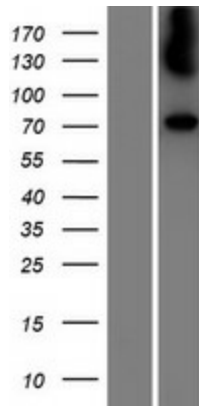
ORF Size: 2055 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	NM_000153.3
RefSeq Size:	4185 bp
RefSeq ORF:	2058 bp
Locus ID:	2581
UniProt ID:	P54803
Cytogenetics:	14q31.3
Domains:	Glyco_hydro_59
Protein Families:	Druggable Genome
Protein Pathways:	Lysosome, Metabolic pathways, Sphingolipid metabolism
MW:	77.06 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC211578



Western blot validation of overexpression lysate (Cat# [LY424893]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211578 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).