

Product datasheet for **SC318156**

Galactosylceramidase (GALC) (NM_000153) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Galactosylceramidase (GALC) (NM_000153) Human Untagged Clone
Tag:	Tag Free
Symbol:	Galactosylceramidase
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene ORF sequence for NM_000153 edited
 ATGGCTGAGTGGCTACTCTCGGCTTCCTGGCAACGCCGAGCGAAAAGCTATGACTGCGGCC
 GCGGGTTCGGCGGGCCGCCCGCGGTGCCCTTGCTGCTGTGTGCGCTGCTGGCGCCCGGC
 GGCGCGTACGTGCTCGACGACTCCGACGGGCTGGGCCGGGAGTTCGACGGCATCGGCGCG
 GTCAGCGGCGGGGCAACCTCCCGACTTCTAGTAAATTACCCAGAGCCCTATCGTTCT
 CAGATATTGGATTATCTCTTTAAGCCGAATTTTGGTGCCTCTTTGCATATTTTAAAAGTG
 GAAATAGGTGGTGGTGGCAGACAACAGCGGCACTGAGCCCTCCACATGCATTATGCA
 CTAGATGAGAATTATTTCCGAGGATACGAGTGGTGGTTGATGAAAGAAGCTAAGAAGAGG
 AATCCCAATATTACACTCATTGGTTGCCATGGTCATTCCCTGGATGGCTGGGAAAAGGT
 TTCGACTGGCCTTATGTCAATCTTCAGCTGACTGCCTATTATGTCGTGACCTGGATTGTG
 GGCGCCAAGCGTTACCATGATTTGGACATTGATTATTTGGAATTTGGAATGAGAGGTCA
 TATAATGCCAATTATATTAAGATATTAAGAAAAATGCTGAATTATCAAGGTCTCCAGCGA
 GTGAAAATCATAGCAAGTGATAATCTCTGGGAGTCCATCTCTGCATCCATGCTCCTTGAT
 GCCGAACTCTTCAAGGTGGTTGATGTTATAGGGGCTCATTATCCTGGAACCCATTGACGA
 AAAGATGCAAAGTTGACTGGGAAGAAGCTTTGGTCTTCTGAAGACTTTAGCACTTTAAAT
 AGTGACATGGGTGACGGCTGCTGGGGTGCATTTTAAATCAGAATTATATCAATGGCTAT
 ATGACTTCCACAATCGCATGGAATTTAGTGGCTAGTACTATGAACAGTTGCCTTATGGG
 AGATGCGGGTTGATGACGGCCCAAGAGCCATGGAGTGGGCACTACGTGGTAGAATCTCCT
 GTCTGGGTATCAGCTCATACCACTCAGTTTACTCAACCTGGTGGTATTACCTGAAGACA
 GTTGGCCATTTAGAGAAAGGAGGAAGCTACGTAGCTCTGACTGATGGCTTAGGGAACCTC
 ACCATCATCATTGAAACCATGAGTCATAAACATTCTAAGTGCATACGGCCATTTCTTCTCT
 TATTTCAATGTGTCAACAATTTGCCACCTTTGTTCTTAAGGGATCTTTTAGTGAATA
 CCAGAGCTACAGGTATGGTATACCAAACCTTGAAAAACATCCGAAAGATTTCTTTTTTAAG
 CAGCTGGATTCTCTATGGCTCCTTGACAGCGATGGCAGTTTCACACTGAGCCTGCATGAA
 GATGAGCTGTTACACTCACCCTCTCACCCTGGTCGCAAAGGCAGCTACCCGCTTCTCT
 CCAAAATCCCAGCCCTTCCCAAGTACCTATAAGGATGATTTCAATGTTGATTACCCATTT
 TTTAGTGAAGCTCCAACTTTGCTGATCAAACCTGGTGTATTTGAATATTTTACAAATATT
 GAAGACCCTGGCGAGCATCACTTACGCTACGCCAAGTTCTCAACCAGAGACCCATTACG
 TGGGCTGCCGATGCATCCAACACAATCAGTATTATAGGAGACTACAACCTGGACCAATCTG
 ACTATAAAGTGTGATGTTTACATAGAGACCCTGACACAGGAGGTGTGTTTATTGCAGGA
 AGAGTAAATAAAGGTGGTATTTTATTAGTGAAGTCCAGAGGAATTTCTTCTGGATTTT
 GCAAAATGGATCTTACAGGTTACAGGTGATTTAGCTGGATGGATTATATATGCTTTAGGA
 CGTGTGAAAGTTACAGCAAAAAAATGGTATACACTCACGTTAACTATTAAGGGTCATTTT
 GCCTCTGGCATGCTGAATGACAAGTCTCTGTGGACAGACATCCCTGTGAATTTTCCAAAG
 AATGGCTGGGCTGCAATTGGAACCTCACTCCTTTGAATTTGCACAGTTTGACAACCTTCTT
 GTGGAAGCCACACGCTAA

Restriction Sites: NotI-NotI
ACCN: NM_000153
Insert Size: 3800 bp

OTI Disclaimer: 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.

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 has been fully sequenced and found three SNPs within the protein associated with this reference, NM_000153.2. Two SNPs don't change amino acid, and one SNP results in a T to A amino acid change.

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_000153.2](#), [NP_000144.2](#)

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

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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.