



Recombinant Human Galactocerebrosidase (GALC)

Product Code	CSB-YP009196HU
Relevance	Hydrolyzes the galactose ester bonds of galactosylceramide, galactosylsphingosine, lactosylceramide, and monogalactosyldiglyceride. Enzyme with very low activity responsible for the lysosomal catabolism of galactosylceramide, a major lipid in myelin, kidney and epithelial cells of small intestine and colon.
Abbreviation	Recombinant Human GALC protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P54803
Alias	Galactocerebroside beta-galactosidase Galactosylceramidase Galactosylceramide beta-galactosidase
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	YVLDDSDGLGREFDGIGAVSGGGATSRLLVNYPEPYRSQILDYLFKPNFGASL HILKVEIGGDGQTTDGTESPHMHYALDENYFRGYEWWLMKEAKKRNPNTLIG LPWSFPGWLKGFDWPYVNLQLTAYYVVTWIVGAKRYHDLIDYIGIWNERSY NANYIKILRKMLNYQGLQRVKIIASDNLWESISASMLLDAELFKVVDVIGAHYPG THSAKDAKLTGKKLWSSSEDFSTLNSDMGAGCWGRILNQNYINGYMTSTIAWN LVASYYEQLPYGRCGLMTAQEPWSGHYVVEPVWVSAHTTQFTQPGWYYLK TVGHLEKGGSYVALTDGLGNLTIIETMSHKHSCIRPFLPYFNVSQQFATFVLK GSFSEIPELQVWYTKLGKTSEFLFKQLDSLWLLDSDGSFTLSLHEDELFTLTT LTTGRKGSYPLPPKSQFPSTYKDDFNVDYPFFSEAPNFADQTGVFEYFTNIE DPGEHHFTLRQVLNQRPIWAADASNTISIIGDYNWNTLTIKCDVYIETPDTGGV FIAGRVNKGILIRSARGIFFWIFANGSYRVTDLAGWIIYALGRVEVTAKKWYT LTLTIKGHFASGMLNDKSLWTDIPVNF PKNGWAAIGTHSFEFAQFDNFLVEATR
Research Area	Cardiovascular
Source	Yeast
Target Names	GALC
Protein Names	Recommended name: Galactocerebrosidase Short name= GALCERase EC= 3.2.1.46 Alternative name(s): Galactocerebroside beta-galactosidase Galactosylceramidase Galactosylceramide beta-galactosidase
Expression Region	43-685aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at



4°C for up to one week.

Tag Info

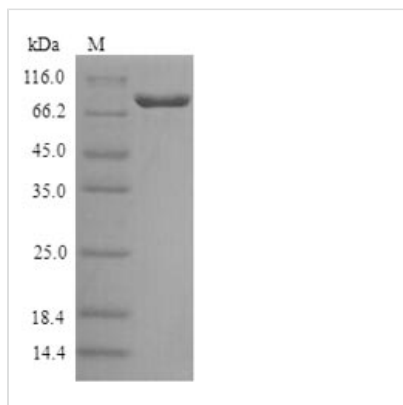
N-terminal 6xHis-tagged

Mol. Weight

74.8kDa

Protein Length

Full Length of Mature Protein

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The production of this Recombinant Human GALC protein started with the GALC gene synthesis. And then using recombinant DNA technology, the GALC gene was inserted into an expression vector so that we could get the recombinant express plasmid of GALC. Transform the plasmid into the cells of Yeast, culture the cells and we could get the desired Recombinant Human GALC protein. But the work was not completed, protein purification and a strict QC system were performed in the last step. The purity is 90%+ determined by SDS-PAGE.

GALC is a gene providing an instruction of making a protein named galactocerebrosidase (GALC) in human. The protein encoded by this gene has several alternative names, including galactocerebroside beta-galactosidase, galactosylceramidase1 and galactosylceramide beta-galactosidase. GALC protein is an enzyme that removes galactose from ceramide derivatives (galactosylceramides). This protein is involved in three biological processes, including galactosylceramide catabolic process, glycosphingolipid metabolic process and myelination.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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