

β-Glucocerebrosidase In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1903

DESCRIPTION	
Product Name	β-Glucocerebrosidase In Vitro Transcribed mRNA-LNP
Gene Name	β-Glucocerebrosidase
Source	The ORF of β-Glucocerebrosidase was cloned in our IVT vector and mRNA was prepared through in vitro transcription and purification. The purified mRNA was further encapsulated with LNP(DSPC:Cholesterol:DMG-PEG:SM102).
Alternative names	β-Glucocerebrosidase
SPECIFICATIONS	
Cap	m7GpppN
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	β-Glucocerebrosidase
3'-UTR	3' UTR comprising two sequence elements derived from the aminoterminal enhancer of split (AES) mRNA and the mitochondrial encoded 12S ribosomal RNA
Poly(A) Tail	A 110-nucleotide poly(A)-tail consisting of a stretch of 30 adenosine residues, followed by a 10-nucleotide linker sequence and another 70 adenosine residues.
Modifications	N1-methyl-pseudouridine
Neutral Lipid	1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC)
Cholesterol	Cholesterol
Ionizable Lipid	1,2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-2000 (PEG2000-DMG)
PEG-lipid	Heptadecan-9-yl 8-((2-hydroxyethyl)(8-(nonyloxy)-8-oxooctyl)amino)octanoate)(SM-102)
Storage	-20 °C
Buffer	PBS, pH7.4
Cryoprotectant	Trehalose
BACKGROUND	
Gene Accession	
Gene Alias	β-Glucocerebrosidase

glucocerebroside, an intermediate in glycolipid metabolism that is abundant in cell membranes (particularly skin cells). It is localized in the lysosome, where it remains associated with the lysosomal membrane. β -Glucocerebrosidase is 497 amino acids in length and has a molecular weight of 59,700 Daltons.

Background

β -Glucocerebrosidase (also called acid β -glucosidase, D-glucosyl-N-acylsphingosine glucohydrolase, or GCase) is an enzyme with glucosylceramidase activity (EC 3.2.1.45) that is needed to cleave, by hydrolysis, the beta-glycosidic linkage of the chemical