

PRODUCT INFORMATION



Lipopolysaccharyl β -1,3-N-acetylgalactosaminyltransferase (*H. influenzae* F3031, recombinant)

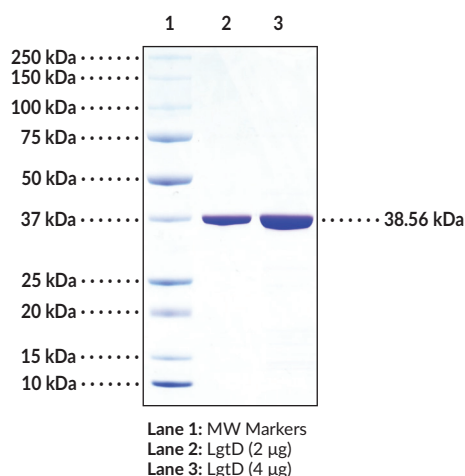
Item No. 44171

Overview and Properties

Synonyms:	LgtD, UDP-GlcNAc Lipooligosaccharide N-Acetylglucosamine Glycosyltransferase
Source:	Active recombinant <i>H. influenzae</i> N-terminal His-tagged LgtD expressed in <i>E. coli</i>
Amino Acids:	1-323
Uniprot No.:	E7A4Y7
Molecular Weight:	38.56 kDa
Storage:	-80°C (as supplied)
Stability:	≥ 1 year
Purity:	$\geq 90\%$ estimated by SDS-PAGE
Supplied in:	50 mM Tris-HCl, pH 7.5, with 50 mM sodium chloride, and 5 mM DTT
Protein	
Concentration:	<i>batch specific</i> mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Images



WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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Description

Lipopolysaccharyl β -1,3-N-acetylgalactosaminyltransferase (LgtD) is an inverting N-acetylgalactosaminyltransferase and a member of glycosyltransferase family 2 (GT2) that is found in *H. influenzae*.^{1,2} A similar protein, lipopolysaccharide α -1,4-galactosyltransferase (LgtC) that is found in *N. meningitidis*, is composed of an N-terminal mixed α/β domain, which contains the active site, and a C-terminal helical domain, which is responsible for attachment to cell membranes.^{3,4} LgtD transfers an N-acetylgalactosamine from UDP-N-acetylgalactosamine (UDP-GalNAc) onto globotriose in the biosynthesis of the glycosphingolipid antigen globohexasaccharide (globoH) or globotetraose-containing LPS.^{5,6} Cayman's Lipopolysaccharyl β -1,3-N-acetylgalactosaminyltransferase (*H. influenzae* F3031, recombinant) protein can be used for enzyme activity assays.

References

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5. Su, D.M., Eguchi, H., Yi, W., *et al.* Enzymatic synthesis of tumor-associated carbohydrate antigen Globo-H hexasaccharide. *Org. Lett.* **10**(5), 1009-1012 (2008).
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