

Product Name: tri-GalNAc-C5-amine

Catalog No.: 7781

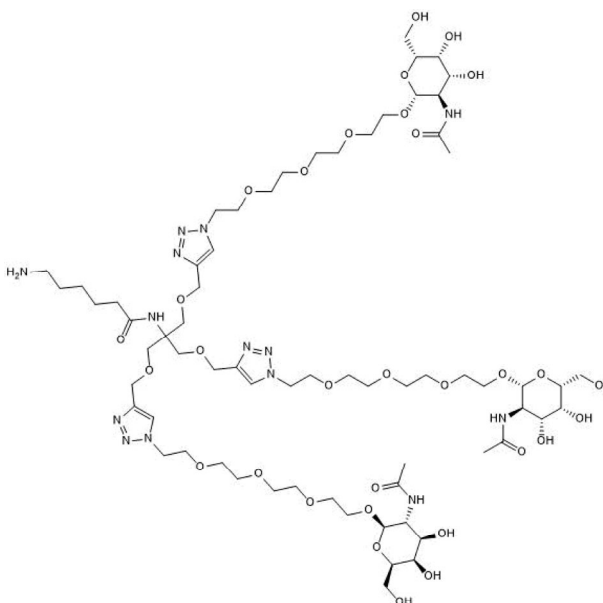
Batch No.: 1

CAS Number: 2098275-86-4

IUPAC Name: *N*-[2-[[[1-[2-[2-[2-[2-[2-(Acetylamino)-2-deoxy-β-D-galactopyranosyl]oxy]ethoxy]ethoxy]ethoxy]ethyl]-1*H*-1,2,3-triazol-4-yl]methoxy]-1,1-bis[[[1-[2-[2-[2-[2-[2-(acetylamino)-2-deoxy-β-D-galactopyranosyl]oxy]ethoxy]ethoxy]ethoxy]ethyl]-1*H*-1,2,3-triazol-4-yl]methoxy]methyl]ethyl]-6-aminohexanamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₆₇H₁₁₈N₁₄O₃₁
Batch Molecular Weight: 1615.75
Physical Appearance: Dark grey solid
Solubility: water to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 91.4% purity
Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

tri-GalNAc-C5-amine is a functionalized asialoglycoprotein receptor (ASGPR) ligand for lysosomal targeting chimera (LYTAC) research and development; each molecule incorporates three ASGPR ligands with an alkylC5 linker and an amine group reactive handle ready for conjugation. Upon binding to the ASGPR, tri-GalNAc conjugates are efficiently internalized via ASGPR-mediated endocytosis. tri-GalNAc conjugation can be employed as a strategy to effectively deliver cargo such as RNA or Cas9 complexes in a cell-specific manner to hepatocytes. Can be used to generate LYTACs, or labeled with dye for tissue imaging.

Physical and Chemical Properties:

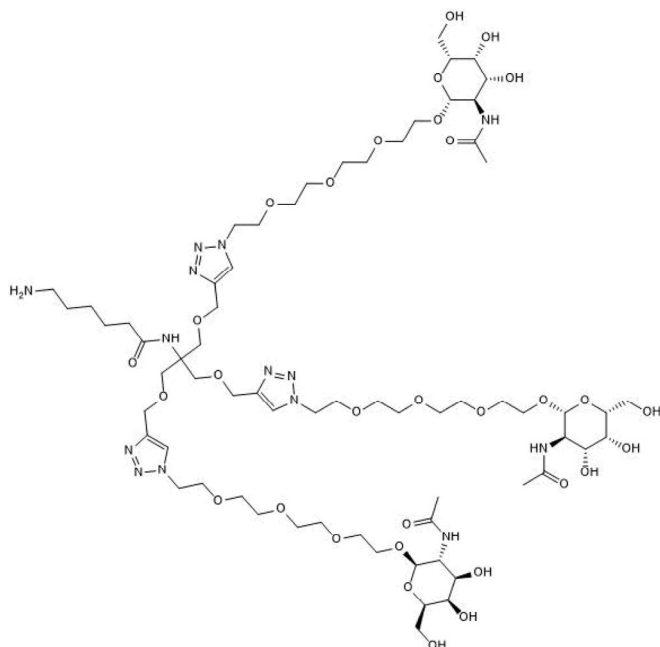
Batch Molecular Formula: C₆₇H₁₁₈N₁₄O₃₁

Batch Molecular Weight: 1615.75

Physical Appearance: Dark grey solid

Minimum Purity: ≥90%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 100 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Sanhueza *et al* (2017) Efficient liver targeting by polyvalent display of a compact ligand for the asialoglycoprotein receptor. *J.Am.Chem.Soc.* **139** 3528-3534. <https://doi.org/10.1021/acs.joc.7b00389>

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