

**CERTIFICATE OF ANALYSIS**

**GENERAL INFORMATION**

**Product No.:** PE932000

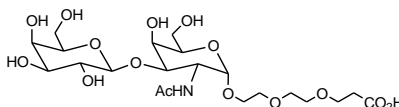
**CAS No.:** N/A

**Product Name:** Galacto-N-biose Ligand: Gal-β(1,3)-GalNAc-α-PEG3-Acid

**Other Names:** TF Disaccharide-PEG3-Acid; T Disaccharide-PEG3-Acid

**Description:** Thomsen-Friedenreich (T or Tf) antigen (Gal-GalNAc) normally linked to a serine or threonine residue (Ser/Thr) is an aberrant tumour-associated carbohydrate antigen (TACA) and assumed to be one of the few chemically well-defined antigens with a proven association with malignancy.

**Structure:**



**Formula:** C<sub>21</sub>H<sub>37</sub>NO<sub>15</sub>

**Mol. Wt.:** 543.52

**Exact Mass:** 543.22

**CHARACTERIZATION**

**PROPERTY**

**OBSERVATION**

**Appearance & Physical State:**

White, solid powder

**Proton NMR (D<sub>2</sub>O, 400 MHz):**

Conforms

**Mass Spectrometry (ESI-POS):**

Conforms, [M+H]<sup>+</sup> = 544.1  
[2M+H]<sup>+</sup> = 1088.4

**Purity (>95% by Proton NMR):**

Conforms

**BATCH INFORMATION**

**Lot No.:**

XXXXXX

**Date Prepared:**

XXXXXX

**NOTES**

1. Solubility: H<sub>2</sub>O.
2. Store as lyophilized powder at -20 ± 5°C.
3. Keep dry. Allow container and contents to warm to room temperature before opening.
4. Avoid storing product in solutions.