

## CERTIFICATE OF ANALYSIS

### GENERAL INFORMATION

**Product No.:** GA120010

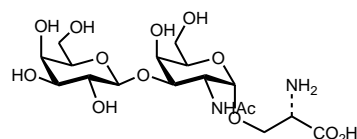
**CAS No.:** N/A

**Product Name:** TF Antigen (Serine standard)

**Other Names:** T Antigen (Serine standard); H-Ser(Gal( $\beta$ (1-3)GalNAc)-OH

**Description:** N/A

**Structure:**



**Formula:** C<sub>17</sub>H<sub>30</sub>N<sub>2</sub>O<sub>13</sub>

**Mol. Wt.:** 470.43

**Exact Mass:** 470.17

### 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> = 471.4  
[2M+H]<sup>+</sup> = 941.8

**Purity (>95% by HPLC):**

N/A

### BATCH INFORMATION

**Lot No.:**

XXXXXX

**Date Prepared:**

XXXXXX

### NOTES

1. Store as lyophilized powder at -20 ± 5 °C.
2. Keep dry. Allow container and contents to warm to room temperature before opening.
3. Avoid storing product in solutions.