

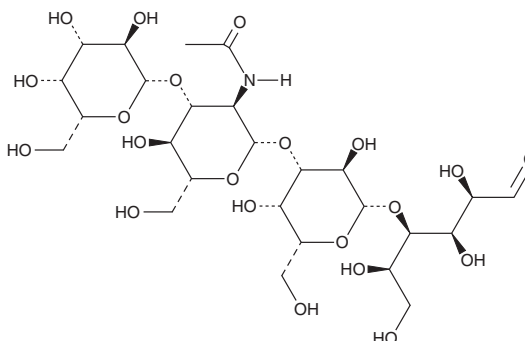
# PRODUCT INFORMATION



## Lacto-N-tetraose

Item No. 39034

**CAS Registry No.:** 14116-68-8  
**Formal Name:** O-β-D-galactopyranosyl-(1→3)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→4)-D-glucose  
**Synonym:** LNT  
**MF:** C<sub>26</sub>H<sub>45</sub>NO<sub>21</sub>  
**FW:** 707.6  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Lacto-N-tetraose (LNT) is supplied as a solid. A stock solution may be made by dissolving the LNT in water. We do not recommend storing the aqueous solution for more than one day.

### Description

LNT is an oligosaccharide that has been found in human breast milk.<sup>1</sup> It is fermented by gut microbiota and promotes the growth of the bacterium *B. longum* and *B. breve*. Levels of LNT are increased in breast milk from mothers of rotavirus-positive neonates with gastrointestinal symptoms and are positively correlated with levels of *Enterobacter* and *Klebsiella* in maternal milk and infant stool.<sup>2</sup>

### References

1. Hu, M., Miao, M., Li, K., *et al.* Human milk oligosaccharide lacto-N-tetraose: Physiological functions and synthesis methods. *Carbohydr. Polym.* **316:121067**, (2023).
2. Ramani, S., Stewart, C.J., Laucirica, D.R., *et al.* Human milk oligosaccharides, milk microbiome and infant gut microbiome modulate neonatal rotavirus infection. *Nat. Commun.* **9(1)**, 5010 (2018).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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