Ludger News

November/December 2020

LudgerTag 2-AA Monosaccharide
Release and Labelling Kit - LT-MONO-96

Christmas Orders and Delivery Information

Our offices will be closed between December 24th and January 3rd.
Orders received before December 16th will be processed and delivered before Christmas.
First orders to go out in 2021 will be on January 5th 2021.

Publication in Nature Communications: Prominent members of the human gut microbiota express endo-acting O-glycanases to initiate mucin breakdown

The role of the human gut microbiota and its interactions with the gut wall, and more specifically the glycans covering proteins lining the gut wall, is a highly complex and under-explored one. Gaining a better understanding into the metabolic mechanisms of the microbiota will ideally lead to a better understanding, and potential therapeutic interventions of a number of diseases that affect people and their digestive system. This paper, led by Newcastle University came about through a number of collaborations of which Ludger played an instrumental part and satisfyingly connected our collaborators withing the Glycoenzymes for Bioindustries consortium, with those at Leiden University Medical College. The paper highlights how investigations of this nature can have both long term objectives, understanding disease mechanisms, and short term opportunities, namely discovery of glycanase enzymes that can be cloned and have industrial and other academic application.

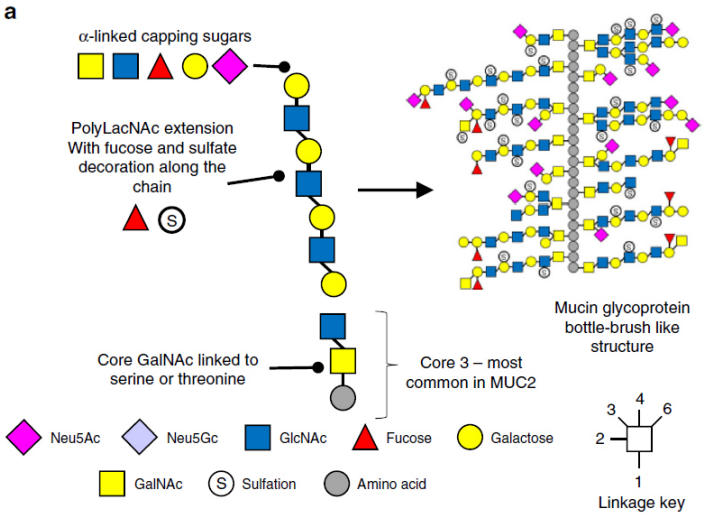


Fig. A model of an intestinal mucin glycoprotein showing complexity and variability of O-glycan chains

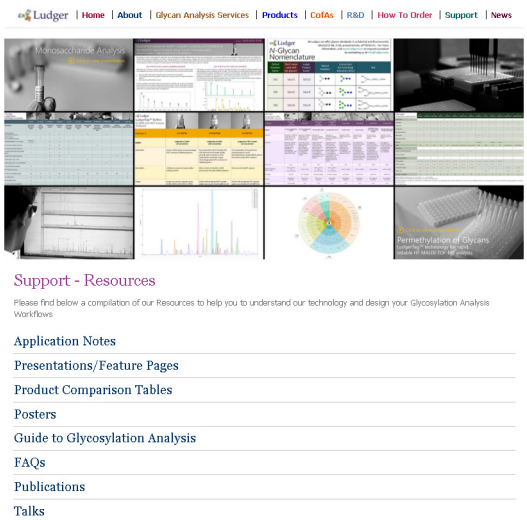
Please visit our Procainamide webpage for more information on how to characterise glycans using LC-MS.
And for more information about this article visit our Publications webpage.

Announcing the Launch of our new Support – Resources webpages

We are pleased to announce the launch of the newly redesigned Support - Resources section of our website at https://ludger.com/support. The new webpages feature a modern design, improved functionality, and easy access to essential information such as application notes, presentations, product comparison tables, FAQs. Our goal with this new section is to provide our visitors an easier way to learn about our technologies, products, and services.

We will be constantly updating our content with helpful information. We hope you find the new webpages useful and easy to navigate.

For any questions, suggestions, feedback or comments, please contact us at info@ludger.com



Ludger Glyco-Tools: Quantitative Monosaccharide Analysis

Monosaccharide analysis is **a regulatory requirement laid out in the ICH Q6B guidelines** for characterisation of biopharmaceuticals. This information can be used at all stages of drug development as a method of determining the type of glycosylation (N-linked and/or O-linked) and the extent to which glycosylation has occurred. It can also be used to demonstrate consistency between batches for QC lot release during the manufacturing process.

A widely used method for monosaccharide analysis is as follows:

- Release of monosaccharides from the glycoprotein by mild acid hydrolysis.
- Fluorescent labelling of released monosaccharides with 2-aminobenzoic acid (2AA).
- Relative quantitative analysis of 2AA-labelled monosaccharides by HPLC or UPLC.

Ludger offers Monosaccharide Release and Labelling kit (Cat No. LT-MONO-96) for quantitation of GlcN, GalN, Gal, Man, Glc, Fuc, Xyl.

The kit contains reagents for up to 96 samples and a quantitative standard (CM-MONOMIX-10) containing 6 monosaccharides (GlcN, GalN, Gal, Man, Glc, Fuc) and Xyl standard (CM-XYL-100).

A key component of well-designed analytical strategy is inclusion of process standards.

Ludger offers several process standards for Monosaccharide analysis which will enable you to check the efficiency of glycan release, labeling and recovery and will give you confidence in the accuracy of your monosaccharide measurements:

- Quantitative glycopeptide standard (BQ-GPEP-A2G2S2-10U)
- Quantitative Man-8 standard (BQ-CN-MAN8-10U)
- Fetuin Glycoprotein Standard (GCP-FET-50U-X4)

We also offer two choices of column dependent on whether you are using HPLC or UPLC systems in your laboratory and HPLC/UPLC solvent for analysis of the labelled monosaccharides:

- LudgerSep R2 HPLC Column (LS-R2-4.6x150)
- LudgerSep uR2 UHPLC Colum (LS-UR2-2.1x50)
- LudgerSep R BPT solvent (LS-R-BPTX10)

For information such as product specifications, companion products, storage, stability as well as images of kit contents visit our Monosaccharide Analysis page.

If you have any questions or to request a quotation, please contact us at info@ludger.com