

Celebrating 25 Years of Glycoscience Innovation!

We are thrilled to announce a momentous milestone at Ludger – our 25th anniversary! Since 1999, when our CEO Dr Daryl Fernandes founded the company, Ludger has provided the biopharmaceutical industry with reliable and affordable glycoprofiling technology.

Our journey has been one of sustainable and organic growth. Over the years, we have faced challenges head-on, all while remaining steadfast in our commitment to serving our customers with reliable, high-throughput, and cost-effective glycotechnology. The dedication of our team has firmly established Ludger as a pioneer and industry leader.



We extend our heartfelt gratitude to the current and former members of our team who made this achievement possible. To our valued customers, a huge thank you for your continued trust and support. Here's to many more years of pushing the boundaries of glycoprofiling technology together!

New Kit Launch for Non-Quantitative Sialic Acid Analysis

Sialic acids affect the clinical safety and efficacy of glycotherapeutics. Therefore, monitoring the level and types of sialic acids (NeuAc and NeuGc) during all stages of a drug life cycle is not only essential but a **regulatory requirement** as laid out in the ICH Q6B guidelines as a Critical Quality Attribute.



LudgerTag DMB Sialic Acid Release & Labelling kits are available in 2 formats which include the quantitative NeuAc and NeuGc standards:

LT-KDMB-A6 (sufficient to process 22 samples)

LT-KDMB-96 (sufficient to process 96 samples)

We have now launched a **new 12-sample non-quantitative labelling kit** for characterising sialic acids:

LT-KDMB-12 (sufficient to process 12 samples)

This kit is ideal for assessing and acquiring a quick overview of the sialic acid moieties present in any glycotherapeutic or biological sample. It includes a Sialic Acid reference panel and **2 sets of 6-sample analysis reagents** which allows the

analysis of a small number of samples.

Vacuum Manifold System for Rapid Sample Clean-Up

LudgerVelocity Vacuum Manifold Accessories significantly speed up the clean-up of samples allowing the processing of **96** samples in under an hour.

Choose the appropriate system based on your preferred clean-up platform: cartridges or 96-well plates.

Type of Setup		Vacuum Manifold Accesories	
Cartridge Setup	LC-A-24 LC-T1-A6	LC-VAC-MANIFOLD-KIT LC-VACUUM-TRAP-KIT	LP-HOLDER-96 LP-PLUG-96
96-well Plate Setup	LC-EC50-96 LC-EXO-96 LC-PBM-96 LC-PERMET-96 LC-PROC-96		LP-COLLPLATE-2ML-96 LP-COLLPLATE-LID-96

LudgerTag™ 2-AA Glycan Labelling kit

For complex glycan analysis



Anthranilic acid or 2-aminobenzoic acid (2-AA) is a widely used fluorescent label for glycan analysis. It is conjugated to the reducing end of released glycans through reductive amination. **2-AA is highly sensitive and stable** when bound to glycans \square .

The **2-AA** label carries **one negative charge** which makes it **very versatile** for analysis using the following platforms:

- Capillary electrophoresis (**CE**) separations □
- HPLC separations such as hydrophilic interaction liquid chromatography (HILIC) (Figure 1), mixed-mode HILIC/ anion exchange, and weak anion exchange (WAX) chromatography separations ☑
- Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (**MALDI-TOF-MS**) analysis in both positive and negative modes ☑
- Electrophoretic separations by polyacrylamide gel electrophoresis

2-AA labelling is traditionally applied in the **glycan analysis of therapeutic and biologically relevant glycoproteins** and uses the same reductive amination labelling method that has been used for 2AB labelling.

The following are other areas where it has found application.

- Analysis of human milk oligosaccharides (**HMOs**) using direct PGC-MS □
- Functionalisation of the 2-AA glycans. The 2-AA tag can be easily and selectively amidated with various amines. These functionalized glycans can be adopted for further conjugation by click chemistry, microarray printing, and neoglycoprotein preparation □

Analytical workflow:

Deglycosylation	Enrichment	Labelling	Clean Up	HILIC UHPLC
LZ-rPNGaseF-kit (15 min -1.5 hour) E-PNG01 E-PNG01-200 (1 to 3 hours)	LC-PBM-96 LC-EC50-96 (2 hours) If suitable for your sample, drying is required at this stage.	LT-KAA-A2 LT-KAA-VP24 (2 hours)	LC-EC50-96 (< 1 hour)	

Use with LudgerClean Manifold Accessories

LC-VAC-MANIFOLD-KIT - Vacuum manifold in 96 plate format LC-VACUUM-TRAP-KIT - Vacuum trap kit LP-COLLPLATE-2ML-96 - Collection plate pack LP-COLLPLATE-LID-96 - Collection plate lid pack

For more information about these products, please visit **our website** or **contact us**.

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