

Labelling of Glycans

Ludger's range of technology for **glycan labelling** has been designed for different needs. The summary table below outlines application, type of label, reductant method and analytical platform for each LudgerTag kit:

LudgerTag Products	LT-KAB-A2	LT-KAB-VP24	LT-KAB-VP96	LT-KAA-A2	LT-KAA-VP24	LT-KPROC-VP24	LT-KDMB-A1	LT-VTAG-24	LT-PERMET-96	LT-MONO-96
Application:										
N-glycans	●	●	●	●	●	●			●	
O-glycans	●	●	●	●	●	●			●	
GSL glycans	●	●	●	●	●	●			●	
IgG glycopeptides								●		
Sialic acids							●			
Monosaccharides										●
Release*							included			included
Label	2AB	2AB	2AB	2AA	2AA	Procainamide	DMB	V-Tag	Permethylation	2AA
Reductant:										
sodium cyanoborohydride	●			●						●
2-picoline borane		●	●		●	●				
Analytical platform:										
HPLC analysis	●	●	●	●	●	○	●	●		●
UHPLC analysis	●	●	●	●	●	○	●	●		●
LC-MS analysis	●	●	●	●	●	○			●	
MALDI-MS	●	●	●	●	●			●	●	
Number of samples	20	24	96	20	24	24	22	24	96	96

* for N-glycans use PNGase F (Cat# E-PNG-xx), for O glycans use Ludger Liberate Orela kit (Cat# LL-ORELA-A2) or hydrazinolysis kit (LL-HYDRAZ-A2), for GSLs use ceramide glycanase (Cat# LZ-CER-HM-KIT), for IgG glycopeptides use protease enzyme e.g. trypsin.

○ Higher sensitivity

To discuss your needs further, please contact: info@ludger.com

Posters

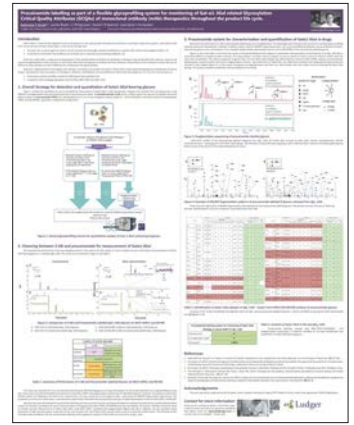
The following posters were presented at WCBP in Washington US on January 26-28th 2016:

Procainamide labelling as part of a flexible glycoprofiling system for monitoring of Gal α 1-3Gal related Glycosylation Critical Quality Attributes (GCQAs) of monoclonal antibody (mAb) therapeutics throughout the product life cycle

A QbD-compatible approach for reliable measurement of sialic acid O-acetylation as a potential Glycosylation Critical Quality Attribute (GCQA) of erythropoietin (EPO) therapeutics

Contact us (claire.morgan@ludger.com) if you would like to be sent a copy of either poster or if you want to discuss identification of GCQAs in your therapeutic.

You can also view our posters page: www.ludger.com/research-and-development/posters.php



IgG System Suitability Standards

Ludger's IgG N-glycan library contains a mixture of fucosylated, bi-antennary glycans which we have released from purified human IgG antibody. Characterisation at Ludger involving HILIC-UPLC and MALDI MS analysis has confirmed that each library contains the following eleven N-glycans:

A CofA for each product is provided which gives peak assignments and relative % peak area information for each of the above glycans.

Cat #
CLIBN-IGG-01 approx. 25 μ g

For more information contact info@ludger.com
or visit our products page: www.ludger.com/products

Oxford nomenclature	Ludger product nomenclature	Common short name
FA2	NGA2F	G0F
FA2B	FA2B	--
FA2G1	FA2G1	G1F
FA2BG1	FA2BG1	--
FA2G2	NA2F	G2F
FA2BG2	--	--
A2G2S1	A1	G1
FA2BG2S1	--	--
A2G2S2	A2	G2S2
FA2G2S2	A2F	G2FS2
FA2BG2S2	--	--



Ceramide Glycanase kit

Ludger's ceramide glycanase kit (**LZ-CER-HM-KIT**) is sufficient to deglycosylate **25 samples**. Ceramide glycanase can be used to deglycosylate a variety of glycosphingolipids (GSLs) by cleaving the β -glycosyl linkage. Free GSL glycans can then be labelled using LudgerTag labelling technology and analysed to identify their glycosylation patterns.

