Product overview

Sialidase Testing Panel – Procainamide Labelled Glycan Standard

Cat. # CPROC-STP-NEUAC-01

Description

Sialidase Testing Panel is a glycan standard containing a mixture of α2-3, α2-6 and α2-8 sialylated oligosaccharides:

1. 3'-Sialyl Lewis X [**Neu5Ac-a2-3Gal-b1-4(Fuc-a1-3)GlcNAc**] – contains α2-3 linked sialic acid along with branched α1-3 fucose (introducing steric hindrance for some enzymatic reactions)
2. Disialyllactose [**Neu5Ac-a2-8NeuAc-a2-3Gal-b1-4Glc**] – linear oligosaccharide containing α2-8 linked sialic acid
3. Sialyllacto-N-tetraose a [**Neu5Ac-α2-3Gal-β1-3GlcNAc-β1-3Gal-β1-4Glc**] – linear oligosaccharide containing α2-3 sialic acid attached to galactose
4. Sialyllacto-N-tetraose c [**Neu5Ac-a2-6Gal-b1-4GlcNAc-b1-3Gal-b1-4Glc**] – linear oligosaccharide containing α2-6 sialic acid attached to galactose
5. Disialyllacto-N-tetraose [**Neu5Ac-a2-3Gal-b1-3(Neu5Ac-a2-6)GlcNAc-b1-3Gal-b1-4Glc**] – branched sialic acid oligosaccharide

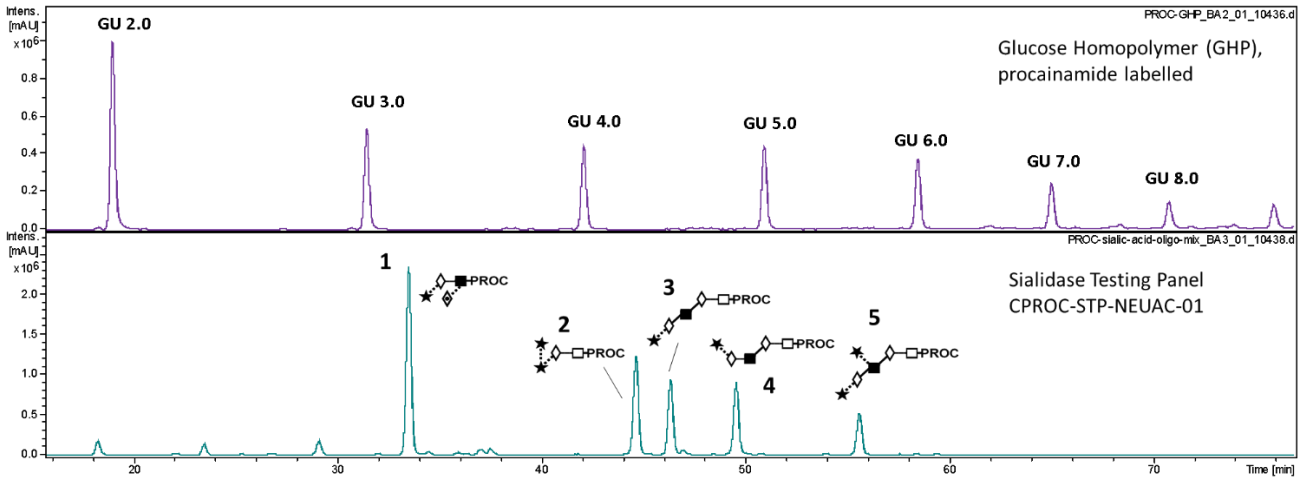
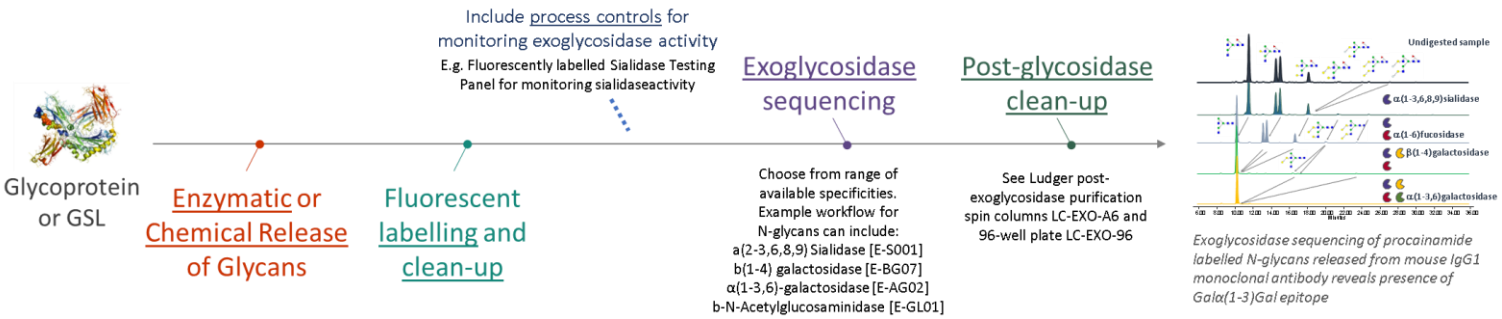


Figure 1: *HILIC-UPLC profiles of procainamide labelled Sialidase Testing Panel (CPROC-STP-NEUAC-01) in comparison with GHP (CPROC-GHP-30).*

Form	Dry. Dried by centrifugal evaporation from an aqueous solution.
Size	20 pmol
Molecular weight	1. 3'-Sialyl Lewis X 1039.4661 2. Disialyllactose 1143.4770 3. Sialyllacto-N-tetraose a 1217.5138 4. Sialyllacto-N-tetraose c 1217.5138 5. Disialyllacto-N-tetraose 1508.6092
Purity	89% pure as assessed by UHPLC.
Storage	Store at -20°C both before and after dissolution. This product is stable for at least 5 years as supplied.
Shipping	The product can be shipped at ambient when dry. After dissolution, ship on dry ice.
Handling	Allow the unopened vial to reach ambient temperature. Centrifuge to ensure that most of the lyophilized material is at the bottom of the vial. Add the desired volume of reconstitution medium, re-cap and mix thoroughly to bring all the oligosaccharide into solution. Ensure that any glass, plasticware or solvents used are free of glycosidases and environmental carbohydrates.
Example use	Sialidase Testing Panel can be used as process positive control for sialidase digestions. Applied alongside the samples, it enables to test if the sialidase used has required specificity and if it had worked correctly.



Exoglycosidase sequencing of procainamide labelled N-glycans released from mouse IgG1 monoclonal antibody reveals presence of Galα(1-3)Gal epitope

***Figure 2**: Workflow for exoglycosidase sequencing of glycans based on HPLC/LC-MS detection. Sialidase Testing Panel can be incorporated as a process control for sialidase digestion. Other controls e.g. fucosylated, α-galactosylated, β-galactosylated glycan standards can be incorporated alongside, depending on exoglycosidases used. Example methods of detection for reaction products include MS and FLD-LC.*

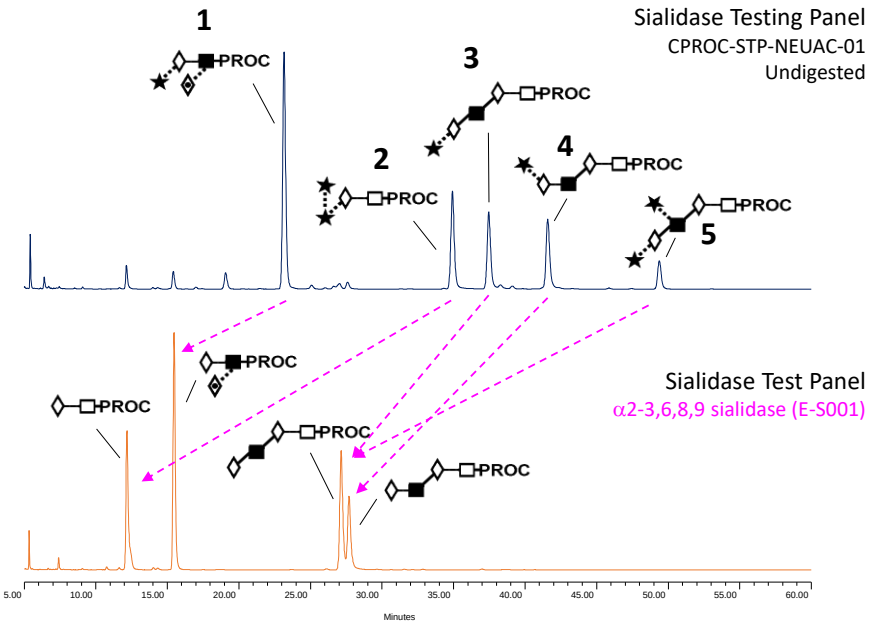


***Figure 3**: HILIC-UPLC profiles of procainamide labelled Sialidase Testing Panel (CPROC-STP-NEUAC-01). Top chromatogram shows undigested sample, bottom chromatogram shows sample treated with broad specificity sialidase (E-S001). Peaks were labelled with glycan structures. Arrows illustrate glycan digestion pathways.*

Related products

Ludger Cat. No.	**Description**
CAB-STP-NEUAC-01	Sialidase Testing Panel, 2-AB labelled
E-S001	Sialidase Au α(2-3,6,8,9)
E-S005	Sialidase Cp α(2-3,6)
E-S007	Sialidase Sp α(2-3)

Warranties and liabilities

Ludger warrants that the above product conforms to the attached analytical documents. Should the product fail for reasons other than through misuse Ludger will, at its option, replace free of charge or refund the purchase price. This warranty is exclusive and Ludger makes no other warrants, expressed or implied, including any implied conditions or warranties of merchantability or fitness for any particular purpose.
Ludger shall not be liable for any incidental, consequential or contingent damages.

This product is intended for *in vitro* research only. Not for human or drug use.

Document Revision Number

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