Ludger

Photo Guide for

LudgerClean™ S Glycan Cleanup Cartridges

Product # LC-S-Ax

(Ludger Product Code: LC-S-Ax, where x denotes pack size)

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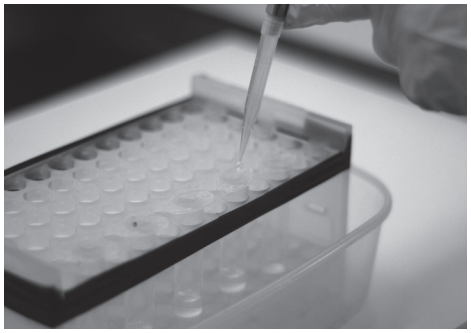
Photo Guide for LudgerClean™ S Glycan Clean Up Cartridges

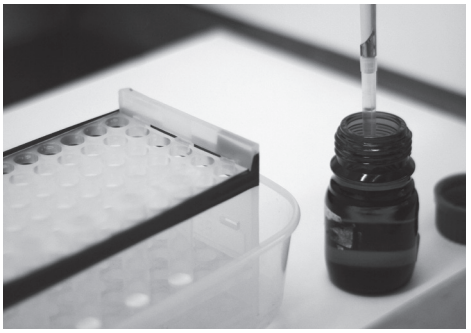
This is a step-by-step visual guide to using our LudgerClean S glycan clean up cartridges (Ludger Cat# LC-S-Ax). You would typically use these for purification of labeled glycans after fluorescent tagging e.g. 2-AB, 2-AA or procainamide.
This document complements the full LC-S-Ax product guide.

1 Prepare the glycan sample

The sample to be cleaned must have a volume of 15 µl or less. If your sample has a greater volume then dry it down using a centrifugal evaporator and reconstitute in not more than 15 µl of water

2 Prime the LudgerClean™ S cartridge



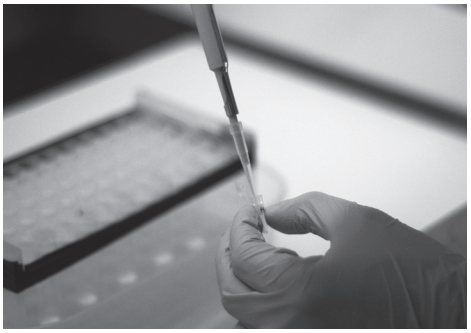
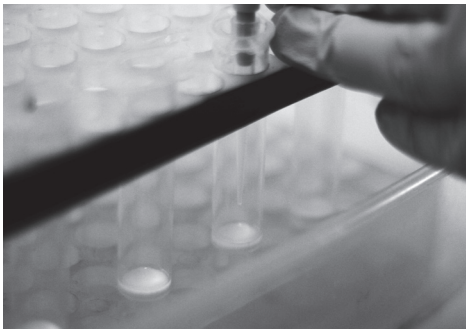


Prime the LudgerClean™ S cartridges (one per sample) by washing each with the following :

- 1st wash - 1 ml water
- 2nd wash - 5 ml 30 % acetic acid (aq)
- 3rd wash - 1 ml acetonitrile

Allow each wash to drain completely before adding the next. If flow is restricted, e.g. by an air gap, apply a slight pressure to the top of the cartridge in order to resume normal flow.

3 Spot sample onto cartridge membrane

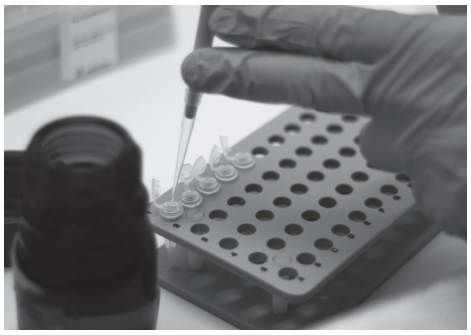




Spot each sample onto a freshly washed cartridge disc ensuring that the disc is still wet with acetonitrile. Spread the spot over the entire disc surface if possible as this aids cleanup.

4 Allow sample to adsorb onto membrane

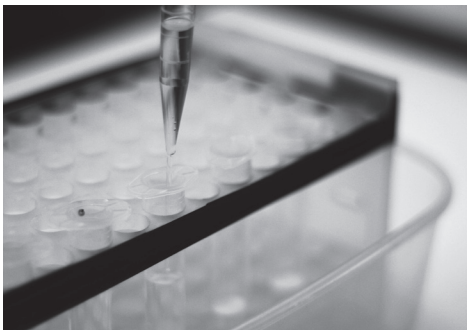
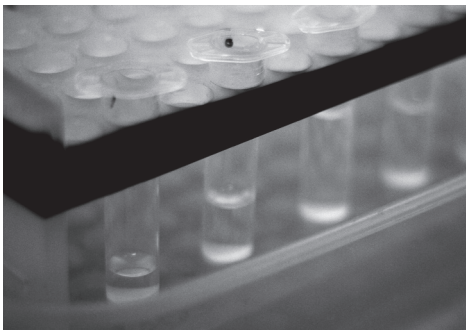
Allow adsorption for 15 minutes.

5 Add residual sample from sample vial



Rinse each sample vial with 100 µl acetonitrile and apply to the corresponding cartridge disc.

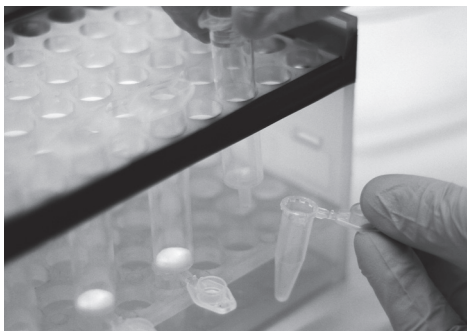
6 Wash non-glycan contaminants off membrane

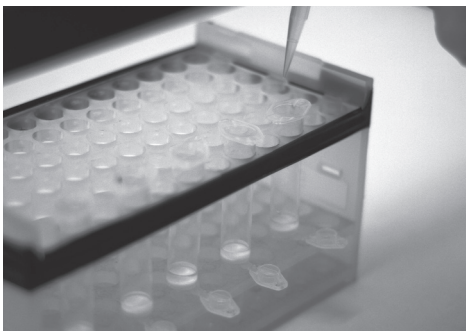




Wash each disc with 1 ml acetonitrile, followed by 5 x 1 ml 96 % acetonitrile* / 4% water

**(for cleanup of O-glycans or N- and O- glycans labeled with procainamide, substitute with 100% acetonitrile)*

7 Elute glycans off membrane into a suitable container by eluting with 2 x 0.5 ml water.





Allow each 0.5 ml aliquot to drain before the next is applied.

8 Dry the eluted glycans (optional)

If appropriate, evaporate the glycan containing fraction to dryness, then dissolve in a desired volume of water or solvent for further analysis.

9 Protocol Complete

Your glycans are now ready to analyse.