



## 多糖纯化柱图文指南

Photo Guide for

LudgerClean™ S  
Glycan Cleanup Cartridges

Product # LC-S-A6

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## Photo Guide for LudgerClean™ S Glycan Clean Up Cartridges

这是使用 LudgerClean™ S 多糖纯化柱 (Ludger Cat# LC-S-A6) 的步骤图文。这些柱子用于纯化荧光标记 (如 2-AB, 2-AA 或普鲁卡因胺标记) 后的聚糖。本文作为 LC-S-A6 产品说明书的完整补充。

This is a step-by-step visual guide to using our LudgerClean S glycan clean up cartridges (Ludger Cat# LC-S-A6). 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-A6 product guide](#).



### 1 多糖样品的制备 Prepare the glycan sample

需要纯化的样品体积最多是 15µl。如果您的样品体积较多，那就使用离心蒸发器烘干后重新加不超过 15µl 的水配制。

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 预备 LudgerClean™ S 多糖纯化柱 Prime the LudgerClean™ S cartridge



预备 LudgerClean™ S 多糖纯化柱 (每样本用一个) 的冲洗方式:

- 第一次冲洗 - 1 ml 水冲洗
- 第二次冲洗 - 5 ml 30% 醋酸 (aq) 冲洗
- 第三次冲洗 - 1 ml 乙腈冲洗

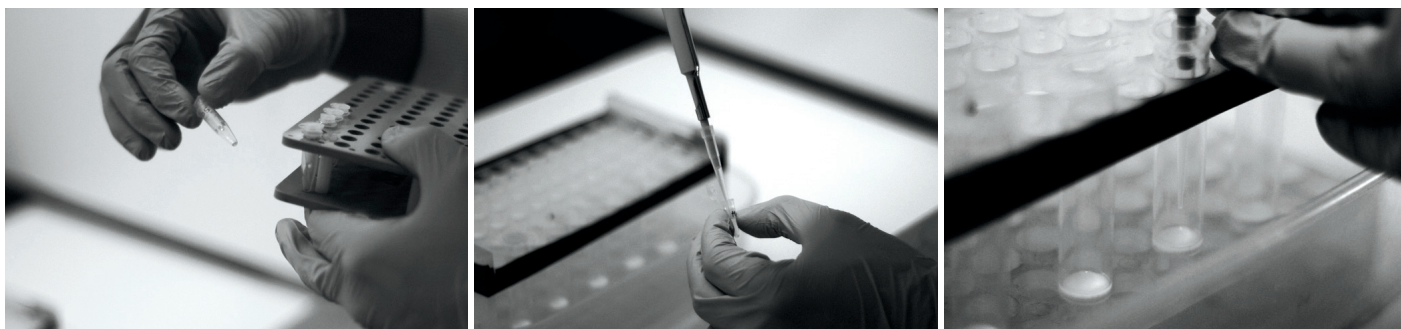
让每一次冲洗完全排干净后再添加下一个溶液。如果流量受阻, 例如被气隙堵塞, 可以在柱子的顶部施加轻微的压力, 以恢复正常流动。

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 在柱子的膜上进行点样 Spot sample onto cartridge membrane



把每个样本点到刚洗过的柱子板上，要确保板仍然被乙腈浸湿。如果可以，在整个板的表面散开点样，因为这样能帮助清洗。

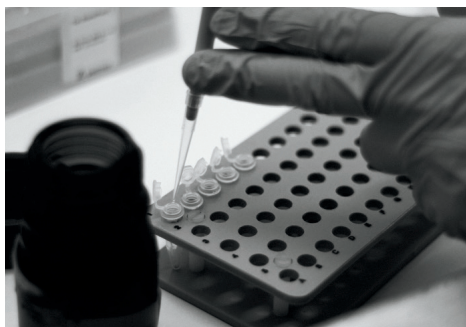
Spot each sample onto a freshly washed cartridge disc ensuring that the disc is still wet with acetonitrile. Spread the spot over the entire disc surface if possible as this aids cleanup.

### 4 让样品吸附到薄膜上 Allow sample to adsorb onto membrane

允许吸附 15 分钟。

Allow adsorption for 15 minutes.

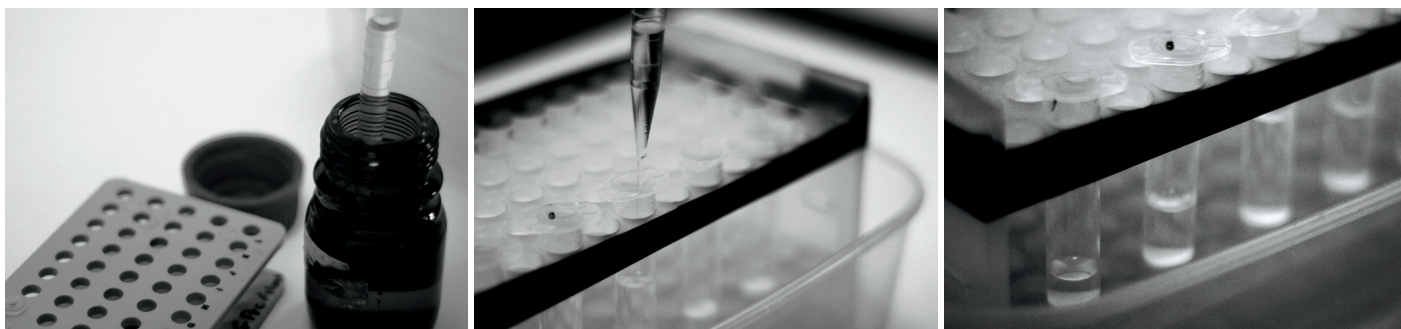
### 5 从样品瓶中添加剩余样品 Add residual sample from sample vial



用 100 $\mu$ l 乙腈冲洗每个样品瓶然后将冲洗添加到相应的柱子板上。

Rinse each sample vial with 100  $\mu$ l acetonitrile and apply to the corresponding cartridge disc.

### 6 洗去膜上的非聚糖杂质 Wash non-glycan contaminants off membrane



用1毫升乙腈冲洗每个板，然后再用 5x1ml 96% 乙腈\* / 4% 的水冲洗

\* (对于O-聚糖或用普鲁卡因胺标记的N-和O-聚糖的清洗，用 100% 乙腈做替代)

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 用 2x0.5ml 水从柱子薄膜上将聚糖洗脱到合适的的容器里。

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



加入下一次 0.5 ml 水之前，确保每 0.5 ml 样本充分流出。

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

## 8 干燥洗脱下来的聚糖(可选) Dry the eluted glycans (optional)

如果适宜，蒸发洗脱的聚糖至干燥状态，然后溶于一定体积的水或溶剂为进行下一步分析。

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

## 9 流程完毕 Protocol Complete



你的聚糖已经可以进行分析了。

Your glycans are now ready to analyse.