

Filtering a Sample through a 3 KDa Filter Tube		
C002		
Version: 1.0	Date: 25-Sep-2018	
Version: 1.1	Date: 02-Oct-2018	

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Purpose This procedure provides information on how to filter samples for NMR Analysis.

Materials

Reagents	Supplies	Equipment
<ul style="list-style-type: none"> HPLC-grade H₂O 	<ul style="list-style-type: none"> Prepared AMICON ultra 0.5ml - 3KDa Filter tube Eppendorf Tube, 1.5 ml 	<ul style="list-style-type: none"> Microcentrifuge

Procedure

1. Preparing an AMICON ultra 0.5ml- 3KDa filter tube for filtration. Ensure the filter is not dried.
2. Filter the sample through the prewashed filter tube:

Step	Details
1.	Discard any remaining water from the sample reservoir (upper part) before adding any sample.
2.	Pipette the sample into the sample reservoir (upper part) of the AMICON ultra 0.5ml- 3KDa filter tube NOTE: The reservoir holds a maximum of 500 µL. Because of this limitation, many samples will require two filters for efficient collection of filtered sample.
3.	Centrifuge the sample for 30-60 minutes at 13,000 rpm or 13,793 rcf at 4 °C. NOTE 1: Some samples may need more time in the centrifuge. Centrifuge until you get the maximum amount of sample possible accumulated in the filtrate receiver. Record the time in your laboratory notebook. NOTE 2: The final filtrate should ideally be clear of any coloration. In most cases, coloration is the result of a filter breakdown, in which case the filtrate should be re-filtered through a new filter.
4.	Transfer the filtered sample into a 1.5 ml labeled Eppendorf tube using a pipette.
5.	Repeat steps 1-4 until the desired total volume of filtered sample has been transferred into the labeled microcentrifuge tube. NOTE: If you cannot obtain the ideal final volume of sample, you will need to top up the sample with HPLC-grade H ₂ O. This will dilute your sample, but provide sufficient volume for spectral acquisition. Record the amount of sample acquired and amount of water added into your laboratory notebook.
6.	After you have removed the filtrate, dispose the whole filtration complex (microcentrifuge tube and filter) in the biohazardous waste container.

References Not applicable

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Related

Documents

C001 – Preparing an AMICON ultra 0.5ml- 3KDa filter tube for filtration

SOP prepared by: Nazanin Assempour

SOP approved by: Neil Taylor

