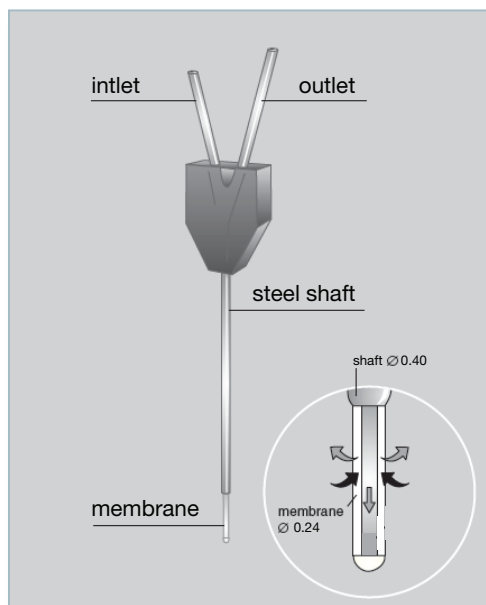


CMA 11 6 kDa Microdialysis Probe User's Manual



TECHNICAL INFORMATION

Membrane

Material	Cuprophane
Molecular Cut-Off	6,000 Daltons
Outer Diameter	0.24 mm
Length	1, 2, 3 and 4 mm

Probe Shaft

Material	Stainless-steel or Metal Free
Diameter	0.40 mm
Length	14 mm

Internal Volume

Inlet Volume	0.1 μ L
Outlet Volume	1 μ L

Instructions for CMA 11 6 kDa Microdialysis Probe

1. Fill a microsyringe with perfusion fluid and mount it in the CMA Microinjection Pump. The Perfusion Fluid must be clean, at room temperature and preferably degassed.
2. Run the pump to make sure that liquid leaves the tip of the syringe cannula.
3. Mount the microdialysis probe in the CMA 11 & 12 Probe/Guide Clip on the CMA/130 *in vitro* Stand. Connect the desired length of tubing to the inlet and outlet of the probe. Short cannula = inlet, long cannula = outlet. Tubing Adapters and FEP-Tubing should be used for all connections. Put the microdialysis probe in a vial filled with perfusion fluid. To facilitate the handling of Tubing Adapters, they should be presoaked in ethanol for a minimum of 10 minutes.
4. Connect the inlet tubing of the microdialysis probe to the syringe cannula, by sliding the Tubing Adapter over the cannula.
5. Flush the probe, lowered in a vial filled with 70% ethanol. Pump the perfusate for 4-5 min. to wash out the glycerol.
6. Put the probe back into the vial filled with perfusion fluid. Flush for another 4-5 min. to wash out the ethanol and air. Use the following flow rates:

Flow	Probe outlet tubing
50 μ L/min	100 mm long
40 μ L/min	200 mm long
15 μ L/min	300 mm long

NEVER EXCEED STATES FLOW RATES!

Check for air bubbles inside the membrane with a stereomicroscope. The membrane may appear to be "sweating" which is due to the ultrafiltration of fluid through the membrane.

7. Set the pump to the required perfusion flow (usually 1-5 μ L/min.) and check for leaks. The microdialysis probe is now ready for use.
8. When changing sample vials, remember to consider the internal volume in the system (see TECHNICAL INFORMATION). This causes a delay that must be calculated when using low perfusion rates and short sampling times.
9. After the experiment, put the microdialysis probe in a vial filled with deionized water. Perfuse with deionized water to prevent salt crystal formation.

ORDER INFORMATION	Ref No.
CMA 11 6 kDa Microdialysis Probe, 1 mm, 3/pkg	CMA 8309581
CMA 11 6 kDa Microdialysis Probe, 2 mm, 3/pkg	CMA 8309582
CMA 11 6 kDa Microdialysis Probe, 3 mm, 3/pkg	CMA 8309583
CMA 11 6 kDa Microdialysis Probe, 4 mm, 3/pkg	CMA 8309584
CMA 11 6 kDa Probe Metal Free, 1 mm, 3/pkg	CMA 8011081
CMA 11 6 kDa Probe Metal Free, 2 mm, 3/pkg	CMA 8011082
CMA 11 6 kDa Probe Metal Free, 3 mm, 3/pkg	CMA 8011083
CMA 11 6 kDa Probe Metal Free, 4 mm, 3/pkg	CMA 8011084
CMA 11 6 kDa Probe β -Irradiated, 1 mm, 3/pkg	CMA 8011001
CMA 11 6 kDa Probe β -Irradiated, 2 mm, 3/pkg	CMA 8011002
CMA 11 6 kDa Probe β -Irradiated, 3 mm, 3/pkg	CMA 8011003
CMA 11 6 kDa Probe β -Irradiated, 4 mm, 3/pkg	CMA 8011004
CMA 11 Guide Cannula, 3/pkg	CMA 8309017
CMA 11 Guide Cannula, 30/pkg	CMA 8309018
CMA 11 Guide Metal Free, 3/pkg	CMA 8011085
CMA 11 Guide β -irradiated, 3/pkg	CMA 8011031
CMA 11 Guide β -irradiated, 30/pkg	CMA 8011032
Tubing Adapter, 10/pkg	CMA 3409500
FEP Tubing, 1 m, 1/pkg	CMA 3409501
FEP Tubing, 1 m, 10/pkg	CMA 8409501
Tubing Connector, 3/pkg	CMA P000113
CMA 11 & 12 Probe Clip	CMA 8309013

WARRANTY

The probes manufactured by CMA Microdialysis are warranted to be free from defects in material and workmanship for a period of one year from the manufacturing date if stored in the original package. Claims should be forwarded without delay to CMA Microdialysis or to your local distributor.

The CMA 11 Microdialysis Probe is not intended for use in humans. It is only suitable for laboratory research in animals. CMA Microdialysis only guarantees single usage of CMA 11 Microdialysis Probes



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