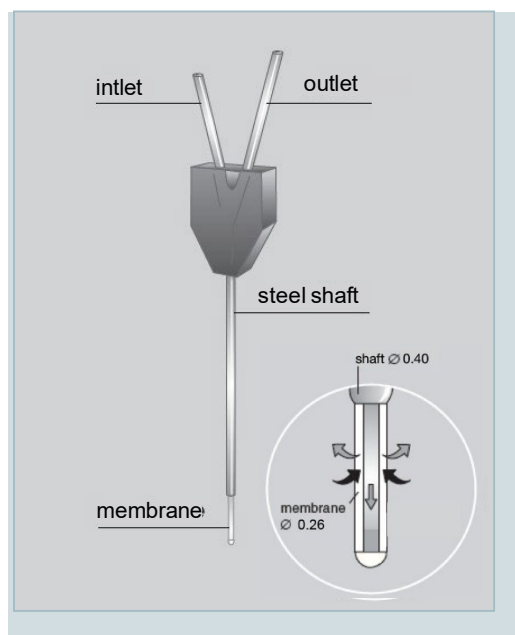


CMA 11 55 kDa Microdialysis Probe User's Manual



TECHNICAL INFORMATION

Membrane

| | |
|-------------------|------------------------|
| Material | Polyethersulfone (PES) |
| Molecular Cut-Off | 55,000 Daltons |
| Outer Diameter | 0.26 mm |
| Length | 1, 2, 3 and 4 mm |

Probe Shaft

| | |
|----------|-----------------|
| Material | Stainless-steel |
| Diameter | 0.40 mm |
| Length | 14 mm |

Internal Volume

| | |
|---|--------|
| Inlet Volume | 0.1 µL |
| Outlet Volume: (Dead volume under membrane + shaft + head) | 0.8 µL |

Instructions for CMA 11 55 kDa Microdialysis Probe

1. Fill a microsyringe with perfusion fluid and mount it in the CMA Syringe 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. Connect the desired length of tubing to the inlet and outlet of the probe. Short cannula = inlet, long cannula = outlet. Tubing Adaptors and FEP Tubing should be used for all connections. **To facilitate the handling of Tubing Adaptors, they should be pre-soaked in ethanol for a minimum of 10 minutes.**
4. Mount the microdialysis probe CMA 11 & 12 Probe Clip on the CMA/130 *in vivo* Stand. Put the microdialysis probe in a vial filled with perfusion fluid.
5. Connect the inlet tubing of the microdialysis probe to the syringe cannula, by sliding the Tubing Adapter over the cannula. Wait for 10 min. The Tubing Adapter must be dry before flushing.
6. Flush the probe with 8-10 µL/min in the Perfusion Fluid for 4-5 min to wash out air. While flushing, "tap" with a scissor on the probe clip (not the probe) to remove air bubbles. The vibrations from the probe clip will in most cases remove the air bubble. If possible, check for air bubbles under a stereomicroscope. If the air bubble is not gone, the flushing and "tapping" must be repeated. The membrane is light blue when wetted, air bubbles occur as whiter spots. When flushing the membrane it 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 µL/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. The probe can be stored in deionized water.
10. For further setup instructions, see CMA 120 System for Freely Moving Animals, User's Manual.

| ORDER INFORMATION | Ref No. |
|---|-------------|
| CMA 11 55 kDa Microdialysis Probe, 1 mm, 3/pkg* | CMA 8012511 |
| CMA 11 55 kDa Microdialysis Probe, 2 mm, 3/pkg* | CMA 8012512 |
| CMA 11 55 kDa Microdialysis Probe, 3 mm, 3/pkg* | CMA 8012513 |
| CMA 11 55 kDa Microdialysis Probe, 4 mm, 3/pkg* | CMA 8012514 |
| CMA 11 Guide Cannula, 3/pkg | CMA 8309017 |
| CMA 11 Guide Metal Free, 3/pkg | CMA 8011085 |
| CMA 11 Guide B-irradiated, 3/pkg | CMA 8011031 |
| 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 |
| Perfusion Fluid CNS, 5 ml, pkg. of 10 | CMA P000151 |

*Metal Free and β -Irradiated Probes are available as Custom Probes

WARRANTY

The probes manufactured by CMA Microdialysis are warranted to be free from defects in material and workmanship for a period of two years 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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