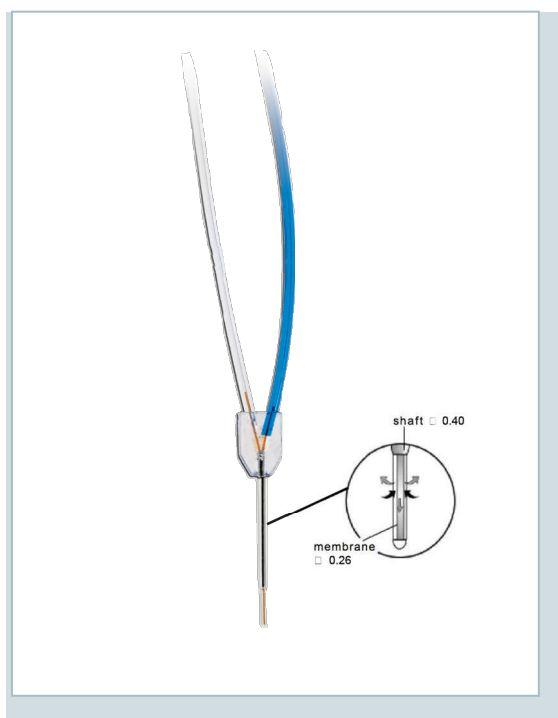


## CMA 7 55 kDa Microdialysis Probe User's Manual



### TECHNICAL INFORMATION

#### Membrane

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

#### Probe Shaft

Material	Stainless-steel
Diameter	0.40 mm
Length	7 mm

#### Internal Volume

Inlet Volume	0.06 $\mu$ L
Outlet Volume	0.3 $\mu$ L
200 mm Inlet tubing (blue) ID: 0.15 mm	3.5 $\mu$ L
200 mm Outlet tubing (transp) ID: 0.15 mm	3.5 $\mu$ L

### Instructions for CMA 7 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. <b>To facilitate the handling of Tubing Adaptors, they should be pre-soaked in ethanol for a minimum of 10 minutes.</b>
4.	Mount the microdialysis probe CMA 7 & 8 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 $\mu$ L/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 ultrafiltration of fluid through the membrane.
7.	Set the pump to the required perfusion flow (usually 1-5 $\mu$ 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. The probe can be stored in deionized water.

\*Metal Free and  $\beta$  –Irradiated Probes are available as Custom Probes

ORDER INFORMATION	Ref No.
CMA 7 55kDa Microdialysis Probe, 1 mm, 3/pkg*	CMA 8012411
CMA 7 55kDa Microdialysis Probe, 2 mm, 3/pkg*	CMA 8012412
CMA 7 Guide Cannula, 3/pkg	CMA P000137
CMA 7 Guide Metal Free. 3/pkg	CMA 8010773
CMA 7 Guide $\beta$ -Irradiated, 3/pkg	CMA 8010683
Tubing Adaptor, 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
Tubing Adapter, 10/pkg	CMA 3409500
CMA 7 & 8 Probe Clip	CMA P000136
Perfusion Fluid CNS, 5 ml, pkg. of 10	CMA P000151

OPTIONAL ACCESSORIES	Ref No.
CMA 4004 Syringe Pump	CMA 400400
CMA 402 Microdialysis Pump with Accessory Kit	CMA 8003100
CMA 402 Microdialysis Pump	CMA 8003110
CMA 110 Liquid Switch	CMA 8308200
CMA 130 In Vitro Stand with CMA 7 clips	CMA 8309104
CMA 470 Refrigerated Fraction Collector	CMA 8002770
Microsyringes 1 mL	CMA 8309020
Microsyringes 2.5 mL	CMA 8309021
For other probes and microdialysis accessories please call your local CMA Microdialysis dealer.	

## 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 7 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 7 Microdialysis Probes*



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