

- For early detection of brain ischemia
- "Gold Tip" visible on CT

• Can be used with the MD System for continuous monitoring or manual sample collection

# 70 Brain Microdialysis Catheter

This sterile, single use catheter is minimally invasive and designed for implantation in brain tissue. The dialysing membrane has been especially developed to achieve optimal diffusing characteristics. This allows a high recovery of substances from the extracellular fluid into the catheter.

The membranes are available in 10, 20 and 30 mm lengths, suitable for different target areas in the brain. The shaft is also available in different lengths making it possible to introduce the catheter by hand or stereotaxically. When introducing the catheter by hand the catheter is tunnelated under the scalp with a tunnelating needle. It is then inserted with the help of a special forceps into the brain tissue through a hole drilled in the skull.

## The "Gold tip" makes the catheter visible on CT

The tip of the catheter contains a gold thread. The "Gold tip" is visible on CT-scanning and makes it possible to locate the exact position of the catheter.

### Early detection of local tissue chemistry changes

Tissue chemistry changes can occur before the patient gets any clinical signs.

 $The 70 \, Brain \, Microdialysis \, Catheter \, connected \, to \, the \, MD \, System \, \, Loke \, allows \, "in \, real \, time" \, continuous \, monitoring \, of \, the \, local \, brain \, tissue \, changes \, of \, Glucose \, \& \, Lactate \, with \, minimum \, workload.$ 

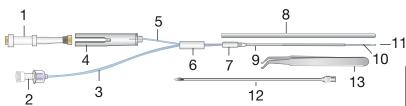
The brain Microvials for analysis of Glucose, Lactate, Microvials for analysis of Glucose, Microvials for analysis of Microvials for analysis of Microvials for analysis of Microvials for analysis of

 $Pyruvate, Glycerol, Glutamate \ and \ Urea\ in \ ISCUS^{flex}\ Microdial ys is\ Analyzer.$ 

For research purposes the collected samples can be further analyzed by various techniques such as HPLC.



### Parts of the 70 Brain Microdialysis Catheter



- Microvial accessory (polystyrene + santoprene)
- 2. Luer lock connection (polycarbonate)
- 3. Inlet tube (polyurethane)
- 4. Vial holder (polycarbonate)
- 5. Outlet tube (polyurethane)
- 6. Stopper (silicone)
- 7. Liquid cross (polysulfone)
- 8. Protection tube (polyethylene)
- 9. Shaft (polyurethane)
- 10. Dialysis membrane (polyamide)
- 11. Gold thread within the catheter tip
- 12. Tunnelating needle accessory
- 13. Forceps accessory



The distal part of the catheter has a gold thread  $(3 \times 0.13 \, \text{mm})$  within the catheter tip, which makes the catheter location in the tissue visible on CT

#### **Technical information**

	MATERIAL	LENGTH mm						Ømm
		P000049	000050	P000080	P0000851	P000052	P000080	
shaft	polyurethane	60	100	60	90	80	60	OD 0.9
membrane	polyamide	10	10	20	20	30	30	OD 0.6
inlet tube	polyurethane	600	600	600	600	600	600	OD1.0
outlet tube	polyurethane	220	220	220	220	220	220	OD1.0
membrane cut-off 20,000 Dalton								

Ordering information	Ref. No.		Ref. No.
70 Brain Microdialysis Catheter 60/10, 4/pkg	P000049	70 Brain Microdialysis Catheter 90/204/pkg *	P000051
70 Brain Microdialysis Catheter 100/10, 4/pkg	P000050	70 Brain Microdialysis Catheter 80/30 4/pkg *	P000052
70 Brain Microdialysis Catheter 60/20, 4/pkg *	P000080	70 Brain Microdialysis Catheter 60/2304/pkg *	P000081
		* Only produced on order.	

Accessories (for use with 106/107 MD Pump)	Ref. No.		Ref. No.
Tunnelating needle, 1pc	P000055	106 Microdialysis Pump, 1pc	P000003
Forceps, 1pc	P000056	107 Microdialysis Pump, 1pc	P000127
Microvials 250/pkg	P000001	106 Pump Syringe 20/pkg	8010191
Microvial Rack 12/pkg	P000028	Perfusion Fluid CNS 10x5mL	P000151
Microvials in rack, Sterile 12x4	P000154	Battery 6V, 1pc	8001788
Pump kit brain tissue, 1pc	8003791		

Accessories (for use with MD System)	Ref. No.		Ref.No
MD System Sensor kit, 1pc	8050187	Tunnelating needle, 1pc	P000055
MD System Syringe kit, Brain Tissue, 1 pc	8050181	Forceps,1pc	P000056
Catheter Extension, 2/pkg	8072001		

**C**€<sub>0413</sub>

CE marked according to the Medical Device Directive, 93/42/EEC

STERILE R

Sterilized by B-radiation



Storage temperature: 4-25 °C



Single use only



Shelf life: 2 years from the manufacturing date