

- For bolt implantation
- "Gold Tip" visible on CT

- For early detection of brain ischemia
- Can be used with the MD System for continuous monitoring or manual sample collection

70 Microdialysis Bolt Catheter

This sterile, single use catheter is minimally invasive and designed for implantation in brain tissue through the PTO 2L bolt kit from Raumedic or the IM3 Bolt Kit from Integra. The catheter has a 130 mm long shaft and a membrane length of 10 mm. The shaft has a reinforced stainless steel section measuring 16.5 mm in length. This reinforcement is located where the compression screw of the bolt is to be tightened.

The dialysing membrane of the catheter has been especially developed to achieve optimal diffusing characteristics. This allows a high recovery of substances from the extracellular fluid into the catheter.

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.

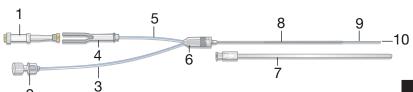
 $The brain \textit{Microvials} for analysis of \textit{Glucose}, \textit{Lactate}, \textit{Microvials} for analysis of \textit{Glucose}, \textit{Microvials} for analysis of \textit{Microvials} for analysis of \textit{Microvials} for analysis of \textit{Micr$

Pyruvate, Glycerol, Glutamate and Urea in ISCUS flex Microdialysis Analyzer.

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



Parts of the 70 Microdialysis Bolt Catheter



- Microvial (polystyrene + santoprene)
- 2. Luer lock connection to syringe (polycarbonate)
- 3. Inlet tube (polyurethane)
- 4. Vial holder (polycarbonate)
- 5. Outlet tube (polyurethane)
- 6. Liquid cross with luerlock connection (ABS)
- 7. Protection tube (polyethylene)
- 8. Shaft (polyurethane) with a 16.5 mm stainless steel re-inforcement
- 9. Dialysis membrane (polyamide)
- 10. Gold thread within the catheter tip



The distal part of the catheter has a gold thread (3 x 0.13 mm) within the catheter tip, which makes the catheter location in the tissue visible on CT

Technical information

	MATERIAL	LENGTH mm	Ø mm				
shaft	polyurethane	130	OD 0.9				
membrane	polyamide	10	OD 0.6				
inlet tube	polyurethane	600	OD1.0				
outlet tube	polyurethane	220	OD1.0				
membrane cut-off 20 000 Dalton							

Ordering information

70 Microdialysis Bolt Catheter 4/pkg P000131

Accessories (for use with 106/107 MD Pump)	Ref. No.		Ref. No.
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 6 V, 1pc	8001788
106 Microdialysis Pump, 1pc	P000003	Pump kit for brain tissue, 1pc	8003791
107 Microdialysis Pump, 1pc	P000127		

Accessories (for use with MD System)	Ref. No.		Ref.No
MD System Sensor kit, 1pc	8050187	Catheter Extension, 1pc	8072001
MD System Syringe kit, Brain Tissue, 1pc	8050181		

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

STERILE R Sterilized by B-radiation

Storage temperature: 4-25 °C

 $(\mathbf{2})$ Single use only

Shelf life: 2 years from the manufacturing date