

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

- 100 000 Dalton Cut-Off dialysis membrane
- For use in brain tissue

71 High Cut Off Microdialysis Bolt Catheter

Intended Purpose

The Brain Microdialysis Bolt Catheter is intended to enable microdialysis of the extracellular (interstitial) fluid of the brain tissue.

Minimally Invasive

The sterile, single use 71 High Cut Off Microdialysis Bolt Catheter is minimally invasive and designed for implantation in brain tissue through the PTO 2L bolt kit from Raumedic or the IM3 Bolt Kit 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 most important characteristic of this microdialysis catheter is the dialysing membrane that has pores big enough to allow diffusion of large molecules such as cytokines.

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.

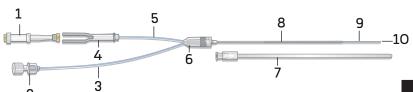
Monitoring tissue chemistry

The 71 High Cut-Off Bolt Microdialysis Catheter is connected to a Microdialysis Pump. To avoid ultrafiltration of the dialysis membrane, the catheter should be perfused with Perfusion fluid CNS Dextran. The outlet tube extends to a holder for a microvial that collects the dialysis sample.

The microdialysis samples can be analyzed in the ISCUSflex Microdialysis Analyzer for Glucose, Lactate, Pyruvate, Glycerol, Glutamate and Urea or sent to a clinical laboratory for analysis of large molecules such as cytokines.



Parts of the 71 High Cut Off Microdialysis Bolt Catheter



- Microvia-Iconsumable (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 (polyarylethersulfone, PAES)
- 10. Gold thread within the catheter tip



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 | Ø mm | | | |
|----|---------------------------------|-----------------------------|-----------|--------|--|--|--|
| sl | naft | polyurethane | 130 | OD 0.9 | | | |
| m | nembrane | polyarylethersulfone (PAES) | 10 | OD 0.6 | | | |
| in | let tube | polyurethane | 600 | OD1.0 | | | |
| 0 | utlet tube | polyurethane | 220 | OD1.0 | | | |
| m | membrane cut-off 100,000 Dalton | | | | | | |

Ordering information

71 High Cut Off Microdialysis Bolt Catheter 4/pkg 8010954

| Accessories/Consumables | Ref. No. | | Ref. No. | |
|-----------------------------|----------|-------------------------------------|----------|--|
| 106 Microdialysis Pump, 1pc | P000003 | Microvials 250/pkg | P000001 | |
| 107 Microdialysis Pump, 1pc | P000127 | Microvial Rack 12/pkg | P000028 | |
| 106 Syringe 20/pkg | 8010191 | Microvials in rack, Sterile 12x4 | P000154 | |
| Battery 6V | 8001788 | Perfusion Fluid CNS Dextran 2x7,5mL | 8050151 | |

STERILE R

Sterilized by B-radiation



Storage temperature: 4-25 $^{\circ}\text{C}$



Single use only



Last date of use



Fulfils EU Medical Device Regulation (MDR) 2017/745



Medical Device