



Push-Pull System

Monitoring of large molecules with New CMA solutions

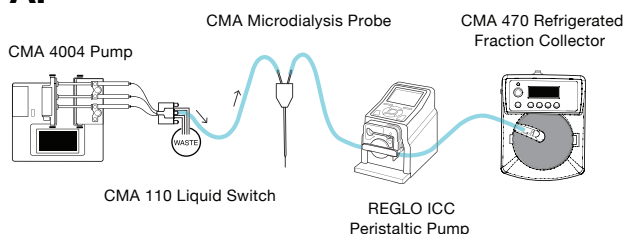
Microdialysis is a bioanalytical sampling technique that allows continuous sampling of compounds from the interstitial fluid of living tissue.

The feasibility of using microdialysis to sample big molecules (such as proteins, cytokines and neuropeptides), presents numerous challenges due to the loss of perfusion fluid through the high molecular weight cut off dialysis membrane. We refer to this loss of perfusion fluid through the large size pores of a high molecular weight microdialysis probe as ultra-filtration.

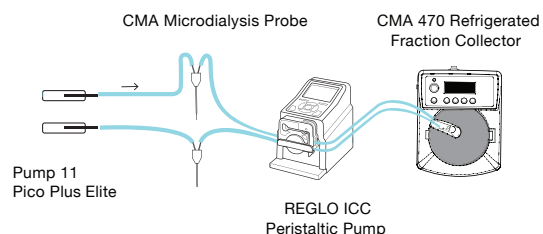
One way to avoid ultra-filtration is to reduce the back pressure caused by the perfusion fluid coming from the probe inlet. We recommend using REGLO ICC Peristaltic Pump for Ultra-High Cut-off Probes. We have tested this pump to ensure that the minimum flow rate of the pump (0.1 $\mu\text{l}/\text{min}$) is accurate and that the 12 rollers provide a smooth flow. Flow rate and direction can be individually adjusted for each channel. The pump calibration is easy for the user. A ready to use peristaltic tubing kit is available for fast connection to microdialysis FEP tubing.

Setup Options:

A:



B:





Order No.	Description
Syringe Pumps	
CMA 8003100	CMA 402 Pump with Accessory Kit
CMA 8003110	CMA 402 Pump
CMA 400400	CMA 4004 Pump
70-4402	HAPC-2: Controller populated with 2 channel modules
70-4806	Pump 11 Pico Plus Elite single syringe pump module (black)
Peristaltic Pumps	
750512	REGLO ICC 2 Channels 12 Rollers Peristaltic Pump
750515	REGLO ICC 3 Channels 12 Rollers Peristaltic Pump
750511	REGLO ICC 4 Channels 12 Rollers Peristaltic Pump
Fraction Collectors	
CMA 8002770	CMA 470 Refrigerated Fraction Collector
Guides	
CMA P000137	CMA 7 Guide Cannula, 3/pkg*
CMA 8309017	CMA 11 Guide Cannula, 3/pkg*

*β –Irradiated Sterile Probes and Guides are available as Custom Orders.

CMA also offers other accessories to complete your microdialysis set-up (CNS perfusion fluid, awake animal systems and surgical/ stereotaxic instruments). Please contact us or visit our website for more information.

Order No.	Description
Accessories	
CMA 8309020	Microsyringe 1 mL
CMA 8309021	Microsyringe 2.5 mL
CMA 3409500	Tubing Adapter, 10/pkg
CMA 3409501	FEP Tubing, 1 m, 1/pkg
CMA 8409501	FEP Tubing, 1 m, 10/pkg
CMA 8012518	FEP Tubing Connector Peristaltic Kit, 3/pkg
CMA P000136	CMA 7 & 8 Probe Clip
CMA 8309013	CMA 11 & 12 Probe Clip
CMA 8308200	CMA 110 Liquid Switch
Probes	
CMA 8012421	CMA 7 500 kDa Microdialysis Probe, 1 mm, 3/pkg*
CMA 8012422	CMA 7 500 kDa Microdialysis Probe, 2 mm, 3/pkg*
CMA 8012423	CMA 7 2MDa Microdialysis Probe, 1 mm, 3/pkg*
CMA 8012424	CMA 7 2MDa Microdialysis Probe, 2 mm, 3/pkg*
CMA 8012521	CMA 11 500 kDa Microdialysis Probe, 1 mm, 3/pkg*
CMA 8012522	CMA 11 500 kDa Microdialysis Probe, 2 mm, 3/pkg*
CMA 8012523	CMA 11 500 kDa Microdialysis Probe, 3 mm, 3/pkg*
CMA 8012524	CMA 11 500 kDa Microdialysis Probe, 4 mm, 3/pkg*
CMA 8012525	CMA 11 2MDa Microdialysis Probe, 1 mm, 3/pkg*
CMA 8012526	CMA 11 2MDa Microdialysis Probe, 2 mm, 3/pkg*
CMA 8012527	CMA 11 2MDa Microdialysis Probe, 3 mm, 3/pkg*
CMA 8012528	CMA 11 2MDa Microdialysis Probe, 4 mm, 3/pkg*



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