

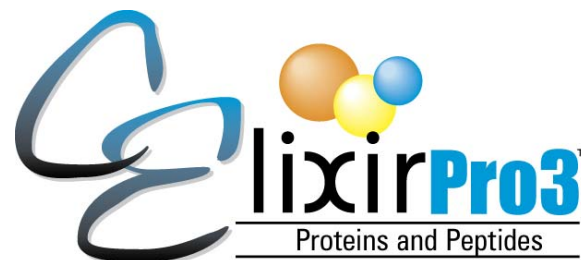
4.0 Mixing Buffers

Buffers at different pH values can be prepared by mixing CElixir-Pro3 Buffer pH=4 and CElixirPro3 Buffer pH=7.2 as follows:

<u>Desired pH:</u>	<u>Buffer pH=4</u>	<u>Buffer pH=7.2</u>
6.2	2.0g	8.0g
5.2	5.0g	5.0g
4.5	8.0g	2.0g

Reordering Information:

06500-P3 CElixir-Pro3, kit for quantitative determinations of proteins and peptides by CE. 100 tests per kit.



Operating Instruction Manual



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CElixirPro3™

Kits for use with CE Quantitative Determinations of Proteins & Peptides

Instructions for use.

1. Intended use and background:

This kit consists of poly-cation and poly-anion solutions that can be used for the quantitative determinations of proteins and peptides. The poly-cations and poly-anions will dynamically coat the inner surface of the capillary wall and produce a fast and consistent EOF (electro-osmotic flow). Patent 5,611,903

2. Contents:

- CElixir-Pro Initiator: 10ml of poly-cation in NTMP buffer pH=7.2 as a ready to use reagent.
- CElixir-Pro Buffer pH4: 25ml of a poly-anion in NTMP buffer pH=4.0 as a ready to use reagent.
- CElixir-Pro Buffer pH7.2: 25ml of poly-anion in NTMP buffer pH=7.2 as a ready to use reagent.
- CElixir-Pro Diluent: 50ml of NTMP buffer pH=7.0 as a ready to use reagent.

Not included in this kit: bi-distilled water, NaOH, 0.1M, capillary, vials and caps.

3. Operating Instructions:

This Operating Manual is written for the Beckman P/ACE MDQ—other instruments can be programmed differently.

3.1 Capillary for use: Simplus™ or other brand of bare fused silica, 50um x 60cm or suitable lengths.

3.2 Instrument: Load CE Instrument as follows:

Buffer Inlet	Buffer Outlet
A1 Conditioner NaOH 0.1M	A1 Water 1ml
B1 Initiator 1.4ml	B1 Buffer 1.4ml
C1 Buffer 1.4ml	C1 Buffer 1.4ml
D1 Water 1.4ml	
E1 Buffer 1.4ml	

3.3 Capillary Initialization:

Time (min)	Event	Value	Duration	Inlet vial	Outlet vial	Summary	Comments
1	Separate - Pressure	50.0 psi	1.00 min	BI:A1	BO:A1	forward	1.4ml conditioner NaOH 0.1M - 1ml Water
2	Rinse - Pressure	50.0 psi	1.00 min	BI:B1	BO:A1	forward	1.4ml Initiator - 1ml Water
3	Rinse - Pressure	50.0 psi	2.00 min	BI:C1	BO:A1	forward	1.4ml Buffer pH=7.2 - 1ml Water
4	Rinse - Pressure	50.0 psi	1.00 min	BI:A1	BO:A1	forward	1.4ml Conditioner NaOH 0.1M - 1ml Water
5	Stop data						
6	End						
7							

3.4 Separation

3.4.1 Initial Condition Settings:

The screenshot shows the 'Initial Conditions' window with the following settings:

- Auxiliary data channels:** Voltage max: 30.0 kV, Current max: 300.0 µA, Power, Pressure.
- Mobility channels:** Mobility, Apparent Mobility, Plot traces after voltage ramp.
- Analog output scaling:** Factor: 1.
- Temperature:** Cartridge: 25.0 °C, Sample storage: 25.0 °C.
- Peak detect parameters:** Threshold: 2, Peak width: 9.
- Trigger settings:** Wait for external trigger, Wait until cartridge coolant temperature is reached, Wait until sample storage temperature is reached.
- Inlet trays:** Buffer: 36 vials, Sample: 48 vials.
- Outlet trays:** Buffer: 36 vials, Sample: No tray.

3.4.2 UV Detector Settings:

The screenshot shows the 'UV Detector Initial Conditions' window with the following settings:

- Electropherogram channel:** Acquisition enabled, Wavelength: 200 nm, Data rate: 4 Hz.
- Filter:** High sensitivity, Normal, High resolution, Peak width [points]: 16-25.
- Relay 1:** Off, On.
- Relay 2:** Off, On.
- Absorbance signal:** Direct, Indirect.

3.4.3 Time Program Settings:

Time (min)	Event	Value	Duration	Inlet vial	Outlet vial	Summary	Comments
1	Rinse - Pressure	50.0 psi	0.50 min	BI:B1	BO:A1	forward	Initiator 1.4ml - Water 1ml
2	Rinse - Pressure	50.0 psi	1.00 min	BI:C1	BO:A1	forward, In vial inc 5	Accelerator - Water 1ml
3	Inject - Pressure	0.5 psi	8.0 sec	SI:A1	BO:C1	No override, forward	Sample - Water 1.4ml
4	Inject - Pressure	0.2 psi	3.0 sec	BI:D1	BO:B1	No override, forward	Post injection Water 1.4ml - Buffer 1.4ml
5	Separate - Voltage	20.0 KV	19.50 min	BI:E1	BO:B1	1.00 Min ramp, normal polarity, In / Out vial inc 5	Buffer 1.4ml
6	Autozero						
7	Rinse - Pressure	50.0 psi	0.50 min	BI:A1	BO:A1	forward	NaOH 0.1M - Water 1ml
8	Stop data						
9	End						
10							