TECHNICAL NOTES | SEI

SERVA Electrophoresis

Biochemicals

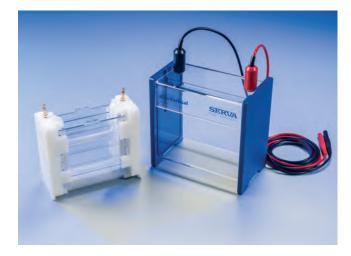
Electrophoresis

Bioseparation Life Sciences Specials



Convenient and easy to operate

The BlueVertical™ PRiME™ is the perfect electrophoresis mini tank system to run precast gels in SDS PAGE, native PAGE, IEF or nucleic acid PAGE applications. The unique innovative clamp system keeps the gel cassettes in their correct place at the inner core running module, leak-free and ready to start within seconds. Built-in convenient operation features result in improved daily work. Developed, produced and assembled in Germany – another top quality product from SERVA.



The BlueVertical™ PRiME™ mini slab gel system offers:

- superb results
- top resolution
- easy and safe to handle
- unique, leak-free clamp system
- smart design made in Germany
- for SERVAGel[™] precast gels*

*for precast gels from other manufacturers please inquire.

BlueVertical™ PRiME™

Premium Resolution in Minigel Electrophoresis

Mini Slab Gel Unit (10 cm x 10 cm)



The unit consists of an outer buffer tank and the inner core running unit. Mounting of precast gels does not require any tedious clamping but is a matter of seconds. The outer buffer tank is made from rugged transparent acrylic – watch your gel while running! A safety lid closes the top, giving the unit a very compact and robust design. Little bench space is required. The unit is, of course, in accordance with the European safety guidelines (CE mark). When quality becomes an issue – choose BlueVertical™ PRiME™.

Specifications	
Inner buffer volume	200 ml
Outer buffer volume	450 ml
Voltage (max)	500 Volt
Current (max)	250 mA
Operating temperature	4 °C – 65 °C
Electrodes	Platinum wire (0.2 mm, 99.99 %)
Dimensions	16 x 15.6 x 9.5 cm (WxHxD)
Weight	1.2 kg

Use of SERVAGeI™ precast mini gels

Savings in time and reliability of results are the benefits in running precast cassette gels. The BlueVerticalTMPRiMETM is especially designed to run SERVA Gel^{TM} precast gels with an outer cassette dimension of 10 x 10 x 0.7 cm.

It is fast and simple to run two slab gels at a time using the BlueVerticalTMPRiMETM. Unpack the precast gel, put it into the inner core unit and simply close the clamps. You will hear a soft "click" – the gel is firmly positioned, leak-free. The locating pegs of the inner core unit will ensure that the unit is placed correctly into the buffer tank. Load your samples, close the safety lid. It will fit only one orientation – this ensures right and safe connection to the power supply.





The fixture of the inner core unit has been engineered to provide four robust clamps (two on both sides) which fix two precast gel cassettes properly and tightly in their correct position. This ensures that the inner buffer chamber is leak-free separated from the outer buffer compartment.

The outer buffer tank works as a heat sink (passive cooling by buffer), sufficient for all applications mentioned above. You may run two SERVA*GeI*TMTG PRiMETM simultaneously at 300 Volt. The run will be completed in about 30 minutes without warming up the buffer significantly. If additional cooling is required (e. g. for IEF applications), a magnetic stirrer can be applied to help circulation of buffer fluid. The BlueVerticalTMPRiMETM minigel system is suited for many applications, i.e. electrophoretic separations of nucleic acids and proteins. Typical settings are shown in the following table.

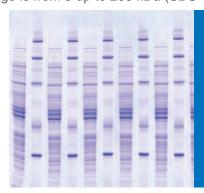
Running conditions using BlueVertical™PRiME™ in different electrophoresis applications

Type of electrophoresis	Type of SERVA <i>Gel</i> ™ Precast Gel	Running conditions
SDS PAGE	SERVA <i>Gel</i> ™ TG PRiME™	Volt _{const.} : 300 V Time: 35 min.
SDS PAGE	SERVA <i>Gel</i> ™ HSE	Volt _{const} : 400 V Time: 20 min.
Native PAGE	SERVA <i>Gel</i> ™ N	Volt _{const.} : 200 V Time: 120 min.
Isoelectric Focusing	SERVA <i>Gel</i> ™ IEF	Volt _{const.} : 100 V for 60 min. Volt _{const.} : 200 V for 60 min. Volt _{const.} : 500 V for 30 min. Time: 150 min.

SERVA*GeI*™ Precast Gels

SERVA*Gel*[™] precast gels deliver premium resolution and superb band sharpness. The gels are poured into unbreakable plastic cassettes (10 x 10 x 0.7 cm) and will fit into most commercially available slab gel tanks. The separation distance is 7 cm, the separation range is from 3 up to 200 kDa (SDS

PAGE), 10 up to 800 kDa (Native PAGE), pl 3 – 10 (IEF). Gels are obtainable with 10 or 12 sample wells or with one 2D well. For all gel types starter kits are available.



Ordering information

Droduct	Otre	Cot no
Product	Qty	Cat. no.
BlueVertical™PRiME™	1 Unit	BV 104
Dummy Plate	1 Piece	BV 104-7
BluePower™ 500	1 Unit	BP 500x4
Power Supply		2 . 000x.





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