

水平电泳 Horizontal Electrophoresis

Bio-Rad 提供完整的, 适合于高、中、低通量应用的, 方便实用的水平电泳设备。

同时支持预制胶与手灌胶的电泳设备：

- Mini-Sub® Cell GT 电泳槽
- 宽式 Mini-Sub® Cell GT 电泳槽

支持手灌胶的电泳设备：

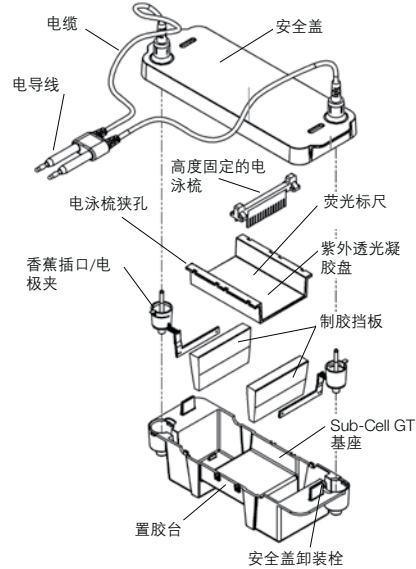
- Sub-Cell® GT 电泳槽
- 96 型 Sub-Cell® GT 电泳槽
- 192 型 Sub-Cell® GT 电泳槽

支持预制胶的电泳设备：

- Mini ReadySub-Cell™ GT 电泳槽
- Wide mini ReadySub-Cell GT 电泳槽

Sub-Cell 家族的主要特点：

- 带有荧光标尺的紫外透光凝胶盘
- 多种不同大小的手灌胶选择
- 适合所有需要的电泳梳
- 清晰的塑胶结构令样品更易观察
- 缓冲液在循环口适合高电压或延长运行的要求



Sub-Cell GT 电泳槽组件

- 更换简便的电极夹
- 通过 IEC 1010 (EN 61010) 电器安全性认证

更多信息, 请访问 www.bio-rad.com/horizontalelectro, 参考或下载资料 # 2660。

请参见

- Certified agaroses: page 142.
- PowerPac Basic power supply: page 151.
- DNA size standards: pages 137–138.
- Premixed electrophoresis buffers: pages 143–144.
- Electrophoresis stains: pages 179–181.
- Gel documentation systems: pages 232–237.
- ReadyAgarose precast gels: page 217.

Sub-Cell 选择指南



| | Mini-sub cell GT* 电泳槽 | 宽式 Mini-sub cell GT** 电泳槽 | Sub cell GT 电泳槽 | 96 型 Sub cell GT 电泳槽 | 192 型 Sub cell GT 电泳槽 |
|---------------------|--------------------------|---------------------------|--|--------------------------|--|
| 电泳槽尺寸 (W×L×H) | 9.2 x 25.5 x 5.6 cm | 17.8 x 25.5 x 6.8 cm | 18 x 40.5 x 9.4 cm | 29 x 30 x 9 cm | 29 x 40 x 9 cm |
| 胶盘尺寸 (W×L) | 7 x 7 cm 7 x 10 cm | 15 x 7 cm 15 x 10 cm | 15 x 10 cm 15 x 15 cm 25 x 20 cm 25 x 25 cm | 25 x 10 cm 25 x 15 cm | 25 x 10 cm 25 x 15 cm 25 x 20 cm 25 x 25 cm |
| ReadyAgarose™ 胶是否兼容 | 是 (小型胶 8-, 12-, 2 x 8 孔) | 是 (小型宽式和 96 型) | 否 | 否 | 否 |
| 样品通量 | 8–30*** | 10–60*** | 1–120† | 24–96*** | 24–192† |
| 底座缓冲液容量 | ~270 ml | ~650 ml | ~1 L | ~2 L | ~3 L |
| 溶液再循环 | 否 | 否 | 否 | 是 | 是 |
| 溴酚蓝迁移率 | ~4.5 cm/hr (at 75 V) | ~4.5 cm/hr (at 75 V) | ~3.0 cm/hr (at 75 V) | ~6.2 cm/hr (at 200 V) | ~5.2 cm/hr (at 200 V) |

* 小型 ReadySub-Cell GT 是专用于跑预制 ReadyAgarose™ 胶的 Mini-Sub cell GT, 胶尺寸 7 x 10 cm, 样品通量是 8, 12 或 2 x 8。这个电泳槽不包括: 铺制门、凝胶盘和梳子。 ** 宽式小型 ReadySub-Cell GT 是专用于跑预制 ReadyAgarose™ 胶的宽式 Mini-Sub cell GT, 胶尺寸 15 x 10 cm, 样品通量是 20, 32, 2 x 32 或 4 x 26。这个电泳槽不包括: 铺制门、凝胶盘和梳子。 *** 样品通量定义: 每块凝胶 1-2 个电泳梳的通量值。 † 样品通量定义: 每块凝胶 1-4 个电泳梳的通量值。

Mini-Sub® Cell GT, 宽式 Mini-Sub® Cell GT 和 Sub-Cell® GT 电泳槽 Mini-Sub® Cell GT, Wide Mini-Sub Cell GT, and Sub-Cell® GT Cells

Mini-Sub® Cell GT 电泳槽



小型水平电泳槽可分离多达 30 个样品，7 和 10 厘米的短而窄的电泳槽使实验快速、简便和经济。Bio-Rad 小型电泳槽 60 V、1.5 小时就能分离 EcoRI 或 Hind III 酶切的 λ 噬菌体 DNA 产物。小片段 DNA 分离在 150 V 电压下只需 15 分钟。所有小型电泳槽都兼容 ReadyAgarose™ 预制胶 — 为常规分离节省时间，得到高度重复的分离结果，这些小型电泳槽包括：缓冲液槽、带电缆的安全盖和水平测量器。

小型 ReadySub-Cell™ GT 电泳槽（货号 170-4487 和 164-0303）与 Mini-Sub cell GT 电泳槽一样，但是小型 ReadySub-Cell™ 电泳槽专用于跑 ReadyAgarose 预制胶。这些电泳槽不包含铺制门、凝胶盘和电泳梳。可订购 ReadySub-Cell GT 电泳槽升级包使电泳槽支持手灌胶。

更多信息，请访问 www.bio-rad.com/horizontalelectro。

订货信息

| Catalog # | Casting Gates | Gel Caster | UVTP Tray (cm) | | Combs | | PowerPac Basic Power Supply (164-5050) |
|-----------------------------------|---------------|------------|----------------|--------|--------|---------|--|
| | | | 7 x 7* | 7 x 10 | 8-Well | 15-Well | |
| Mini-Sub Cell GT Systems** | | | | | | | |
| 170-4406 | • | | • | | • | • | |
| 170-4466 | | | | • | • | • | |
| 170-4486 | • | • | • | | • | • | |
| 170-4467 | | • | | • | • | • | |
| 164-0300 | | • | | • | • | • | • |
| 170-4487 | | | | | | | |
| 164-0303 | | | | | | | • |

Catalog # Description

Mini-Sub Cell GT Accessories

| | |
|------------|--|
| 170-4491 | Mini Handcasting Kit , includes 7 x 7 cm casting gates, 15-well 1.5 mm fixed-height comb, 8-well 1.5 mm fixed-height comb |
| 170-4422 | Mini-Gel Caster , for Mini-Sub and wide Mini-Sub cell GT systems |
| 170-4436* | Sub-Cell GT UV-Transparent Mini-Gel Tray , 7 x 7 cm (trays have 2 slots for fixed-height combs) |
| 170-4435 | Sub-Cell GT UV-Transparent Mini-Gel Tray , 7 x 10 cm (trays have 2 slots for fixed-height combs) |
| 170-4330** | Original UV-Transparent Mini-Gel Tray , 7 x 10 cm |
| 170-4434 | Mini-Sub Cell GT Casting Gates , 2 |
| 170-4362 | Mini-Sub Cell GT Anode (Red) Quick Snap Electrode Assembly |
| 170-4363 | Mini-Sub Cell GT Cathode (Black) Quick Snap Electrode Assembly |
| 170-4331 | Mini-Comb Holder , for Mini-Sub cell adjustable-height combs |

| Catalog # | # of Wells | Height† | Thickness, mm | Width of Well, mm | Length of Teeth, mm | Volume, µl (in 5 mm deep gel) |
|---|---------------|------------|---------------|-------------------|---------------------|-------------------------------|
| Combs for Mini-Sub Cell GT Systems | | | | | | |
| 170-4464 | 15 | Fixed | 0.75 | 3 | 10 | 11.25 |
| 170-4465*** | 15 | Fixed | 1.5 | 3 | 10 | 22.5 |
| 170-4332 | 15 | Adjustable | 1.0 | 2.6 | 10.2 | 13 |
| 170-4462 | 8 | Fixed | 0.75 | 5.5 | 11 | 20 |
| 170-4463*** | 8 | Fixed | 1.5 | 5.5 | 11 | 40 |
| 170-4333 | 8 | Adjustable | 1.0 | 5.5 | 10.2 | 27.5 |
| 170-4461 | 2 preparative | Fixed | 1.5 | 20 | 10 | 150 |
| | 2 reference | | | 4 | | 30 |
| 170-4460 | 1 preparative | Fixed | 1.5 | 44 | 10 | 330 |
| | 2 reference | | | 3 | | 22.5 |
| 170-4342 | 1 preparative | Adjustable | 3 | 43.3 | 10.2 | 645 |
| | 2 reference | | | 3 | | 45 |

* Allows casting gels in the cell using casting gates; 7 x 10 gels can be cast with a gel caster. ** Mini-Sub cell systems purchased before 1996 (Mini-Sub DNA cell) require casting tray, catalog #170-4330. This tray is not compatible with the Mini-Sub cell GT system. *** Combs included in systems. † Fixed-height combs must be used with Mini-Sub cell GT system gel trays. Adjustable-height combs require comb holder, catalog #170-4331.

宽式 Mini-Sub® Cell GT 电泳槽



宽式 Mini-Sub® Cell GT 电泳槽适合多样品和快速检测方面的应用。常用系统有一个宽的平台，每个电泳梳可以分离 30 个样品。宽式 Mini-Sub® Cell GT 电泳槽与 Sub-Cell GT 电泳槽的宽度一样，电泳梳架、电泳梳和 15 x 10 cm 的凝胶盘可以与大的 Sub-Cell GT 的互换。所有宽式小型电泳槽都能兼容 ReadyAgarose 预制胶，系统包括：缓冲液槽、带电缆的安全盖和水平测量器。

宽式小型 ReadySub-Cell™ GT 电泳槽（货号 170-4489 和 164-0304）与宽式 Mini-Sub cell GT 电泳槽一样，但是专用于跑预制 ReadyAgarose 胶。这个电泳槽不包含：铺制门、凝胶盘和电泳梳。可订购 ReadySub-Cell GT 电泳槽升级包使电泳槽支持手灌胶。

更多信息，请访问 www.bio-rad.com/horizontalelectro。

订货信息

| Catalog # | Casting Gates | Gel Caster | UVTP Tray (cm) | | Combs | | PowerPac Basic Power Supply (164-5050) |
|--------------------------------------|---------------|------------|----------------|---------|---------|---------|--|
| | | | 15 x 7* | 15 x 10 | 15-Well | 20-Well | |
| Wide Mini-Sub Cell GT Systems | | | | | | | |
| 170-4405 | • | | • | | • | • | |
| 170-4468 | | | | • | • | • | |
| 170-4485 | • | • | • | | • | • | |
| 170-4469 | | • | | • | • | • | |
| 164-0301 | | • | | • | • | • | • |
| 170-4489 | | | | | | | • |
| 164-0304 | | | | | | | • |

Catalog # Description

Wide Mini-Sub Cell GT Accessories

| | |
|-----------------|---|
| 170-4497 | Wide Mini Handcasting Kit , includes 15 x 7 cm tray, casting gates, 15-well 1.5 mm fixed-height comb, 20-well 1.5 mm fixed-height comb |
| 170-4422 | Mini-Gel Caster , for Mini-Sub and wide Mini-Sub cell GT systems |
| 170-4426 | Sub-Cell GT UV-Transparent Wide Mini-Gel Tray , 15 x 7 cm (trays have 2 slots for fixed-height combs) |
| 170-4416**, *** | Sub-Cell GT UV-Transparent Gel Tray , 15 x 10 cm (trays have 2 slots for fixed-height combs) |
| 170-4425 | Wide Mini-Sub Cell GT Casting Gates , 2 |
| 170-4372 | Wide Mini-Sub Cell GT Anode (Red) Quick Snap Electrode Assembly |
| 170-4373 | Wide Mini-Sub Cell GT Cathode (Black) Quick Snap Electrode Assembly |
| 170-4320 | Comb Holder , for Sub-Cell and wide Mini-Sub Cell adjustable-height combs |

* Allows casting gels in the cell using casting gates; 15 x 10 cm gels can be cast with a gel caster. ** Tray is compatible with the Sub-Cell DNA system. *** 15 x 10 cm gel tray can be used for both wide Mini-Sub cell GT and Sub-Cell GT cells.

Sub-Cell® GT 电泳槽



Sub-Cell GT 电泳槽是 Sub-Cell 家族中功能最灵活的水平电泳槽，具有最广泛的凝胶长度、样品梳和分离模式选择，可理想地用于 Southern 和 northern 杂交等操作。多达 30 个样品可以在 25 cm 凝胶长度内分离。如果用 4 排电泳梳，可以跑 120 个样品。所有的 Sub-Cell GT 电泳槽都包括：缓冲液槽、带电缆的安全盖、水平测量器和电泳梳（15 孔和 20 孔）。系统配置包括的附件都可用。

水平电泳

Mini-Sub Cell GT, 宽式 Mini-Sub Cell GT 和 Sub-Cell GT 电泳槽

www.bio-rad.com/horizontalelectro

| 订货信息 | | Casting Gates | Gel Caster | UVTP Tray (cm) | | | | PowerPac Basic Power Supply (164-5050) |
|--------------------------------|---|---------------|------------|----------------|----------|---------|---------|--|
| Catalog # | Description | | | 15 x 10 | 15 x 15* | 15 x 20 | 15 x 25 | |
| Sub-Cell GT Systems | | | | | | | | |
| 170-4401 | | | | • | | | | |
| 170-4402 | | • | | | • | | | |
| 170-4403 | | | | | | • | | |
| 170-4404 | | | | | | | • | |
| 170-4481 | | | • | • | | | | |
| 170-4482 | | • | • | | • | | | |
| 170-4483 | | | • | | | • | | |
| 170-4484 | | | • | | | | • | |
| 164-0302 | | • | • | | • | | • | |
| Sub-Cell GT Accessories | | | | | | | | |
| 170-4412 | Gel Caster, full size | | | | | | | |
| 170-4416** | Sub-Cell GT UV-Transparent Gel Tray, 15 x 10 cm (trays have 2 slots for fixed-height combs) | | | | | | | |
| 170-4417* | Sub-Cell GT UV-Transparent Gel Tray, 15 x 15 cm | | | | | | | |
| 170-4418 | Sub-Cell GT UV-Transparent Gel Tray, 15 x 20 cm | | | | | | | |
| 170-4419 | Sub-Cell GT UV-Transparent Gel Tray, 15 x 25 cm | | | | | | | |
| 170-4415 | Sub-Cell GT Casting Gates, 2 | | | | | | | |
| 170-4392 | Sub-Cell GT Anode (Red) Quick Snap Electrode Assembly | | | | | | | |
| 170-4393 | Sub-Cell GT Cathode (Black) Quick Snap Electrode Assembly | | | | | | | |
| 170-4320 | Comb Holder, for Sub-Cell and wide Mini-Sub cell adjustable-height combs | | | | | | | |

* Allows casting gels in the cell using casting gates. Other gel sizes can be cast with a gel caster. ** 15 x 10 cm gel tray can be used for both Sub-Cell GT and wide Mini-Sub cell GT cells.

Sub-Cell® 和宽式 Mini Sub-Cell GT 电泳槽适用电泳梳

| 订货信息 | | # of Wells | Height | Thickness, mm | Width of Well, mm | Length of Teeth, mm | Volume, µl (in 5 mm deep gel) |
|--|------------------------------|------------|--------|---------------|-------------------|---------------------|-------------------------------|
| Catalog # | Description | | | | | | |
| Combs for Sub-Cell and Wide Mini Sub-Cell GT Systems* | | | | | | | |
| 170-4449 | 30 | Fixed | 1.5 | 2.7 | 14 | 20.25 | |
| 170-4344 | 30 | Adjustable | 1.5 | 2.7 | 19.1 | 20.25 | |
| 170-4447 | 20 | Fixed | 0.75 | 5 | 15 | 18.75 | |
| 170-4448** | 20 | Fixed | 1.5 | 5 | 15 | 36.3 | |
| 170-4321 | 20 | Adjustable | 0.75 | 4.8 | 19.1 | 17 | |
| 170-4322 | 20 | Adjustable | 1.5 | 4.8 | 19.1 | 34 | |
| 170-4445 | 15 | Fixed | 0.75 | 6 | 15 | 20.7 | |
| 170-4446** | 15 | Fixed | 1.5 | 6 | 15 | 45 | |
| 170-4323 | 15 | Adjustable | 0.75 | 5.5 | 19.1 | 21 | |
| 170-4324 | 15 | Adjustable | 1.5 | 5.5 | 19.1 | 42 | |
| 170-4443 | 10 | Fixed | 0.75 | 10 | 14 | 37.5 | |
| 170-4444 | 10 | Fixed | 1.5 | 10 | 14 | 75 | |
| 170-4325 | 10 | Adjustable | 0.75 | 9.9 | 19.1 | 37 | |
| 170-4326 | 10 | Adjustable | 1.5 | 9.9 | 19.1 | 74 | |
| Preparative Combs for Sub-Cell GT Systems* | | | | | | | |
| 170-4442 | 4 preparative 2 reference | Fixed | 1.5 | 27 3 | 14 | 202 22 | |
| 170-4441 | 2 preparative 2 reference | Adjustable | 1.5 | 50 4 | 14 | 375 30 | |
| 170-4440 | 1 preparative 2 reference | Fixed | 1.5 | 106 4 | 20 | 795 30 | |
| 170-4328 | 1 preparative 2 reference | Adjustable | 3 | 106 4 | 19.1 | 1,590 60 | |
| Multichannel Pipet-Compatible Combs for Sub-Cell and Wide Mini Sub-Cell GT Systems* | | | | | | | |
| 170-4456 | 26 | Fixed | 0.75 | 3 | 15 | 11.25 | |
| 170-4457 | 26 | Fixed | 1.5 | 3 | 15 | 22.5 | |

continues

Multichannel Pipet-Compatible Combs for Sub-Cell and Wide Mini Sub-Cell GT Systems (cont.)*

| Catalog # | # of Wells | Height | Thickness, mm | Width of Well, mm | Length of Teeth, mm | Volume, μ l (in 5 mm deep gel) |
|-----------|------------|--------|---------------|-------------------|---------------------|------------------------------------|
| 170-4454 | 18 | Fixed | 0.75 | 3 | 14 | 11.25 |
| 170-4455 | 18 | Fixed | 1.5 | 3 | 14 | 22.5 |
| 170-4452 | 14 | Fixed | 0.75 | 6 | 20 | 22.5 |
| 170-4453 | 14 | Fixed | 1.5 | 6 | 20 | 45 |
| 170-4450 | 10 | Fixed | 0.75 | 6 | 14 | 22.5 |
| 170-4451 | 10 | Fixed | 1.5 | 6 | 14 | 45 |

* Fixed-height combs must be used with GT gel trays. Adjustable-height combs require comb holder, catalog #170-4320.

** Combs included in systems.

Sub-Cell® Model 96 型电泳槽



Sub-Cell 96 型电泳槽是中、高通量分析的理想选择，包含两个 51 孔电泳梳，与多通道移液器匹配。较短的凝胶长度（10 和 15 厘米）和 26 孔梳使 Sub-Cell Model 96 型电泳槽成为分子生物学实验室的常规配置。所有的 Sub-Cell Model 96 型电泳槽包含：缓冲液槽、带电缆的安全盖、水平测量器和电泳梳（26 孔和 51 孔）。系统配置包括的附件都可提供。

订货信息

| Catalog # | Casting Gates | Gel Caster | UVTP Tray (cm) | | PowerPac Basic Power Supply (164-5050) |
|----------------------------------|---------------|------------|----------------|---------|--|
| | | | 25 x 10* | 25 x 15 | |
| Sub-Cell Model 96 Systems | | | | | |
| 170-4502 | • | | • | | |
| 170-4503 | | | | • | |
| 170-4500 | • | • | • | | |
| 170-4501 | | • | | • | |
| 164-0305 | • | • | • | | • |

Catalog # Description

Sub-Cell Model 96 Accessories

| | |
|-----------|--|
| 170-4514 | Model 96 Gel Caster |
| 170-4521* | Model 96/192 UV-Transparent Gel Tray, 25 x 10 cm |
| 170-4522 | Model 96/192 UV-Transparent Gel Tray, 25 x 15 cm |
| 170-4520 | Model 96/192 Gel Casting Gates, 2 |
| 170-4518 | Model 96/192 Anode (Red) Electrode Assembly |
| 170-4519 | Model 96/192 Cathode (Black) Electrode Assembly |
| 170-4537 | Model 96/192 Buffer Recirculation Kit, includes 2 recirculation port fittings, 6' Tygon tubing, 4 tubing clips |
| 170-4525 | Sub-Cell Models 96 and 192 Comb Holder |

| Catalog # | # of Wells | Height | Thickness, mm | Width of Well, mm | Length of Teeth, mm | Volume, μ l (in 5 mm deep gel) |
|--|-----------------------------------|--------|---------------|-------------------|---------------------|------------------------------------|
| Adjustable-Height Combs for Sub-Cell Model 96 Systems** | | | | | | |
| 170-4528*** | 51 | — | 0.75 | 3 | 15 | 11.25 |
| 170-4529***† | 51 | — | 1.5 | 3 | 15 | 22.5 |
| 170-4526*** | 26 | — | 0.75 | 6 | 15 | 22.5 |
| 170-4527***,† | 26 | — | 1.5 | 6 | 15 | 45 |
| 170-4530 | 2 or 4 preparative 2 reference | — | 0.75 | 46 or 98 6 | 15 | 172.5 or 367.5 22.5 |
| 170-4531 | 2 or 4 preparative 2 reference | — | 1.5 | 46 or 98 6 | 15 | 345 or 735 45 |

* Allows casting gels in the cell using casting gates; 25 x 15 cm gels can be cast with a gel caster. ** Combs for Sub-Cell Model 96 cells can be used with Sub-Cell Model 192 cells and vice versa. Adjustable-height combs require comb holder, catalog #170-4525. Each system includes 1 comb holder.

*** Multichannel-pipet compatible. † Combs included in systems.