

# RESEARCHER RANGE HORIZONTAL GEL APPARATUS SALIENT FEATURES



# Leak-proof

- No buffer leakage through plastic joints as sticking is done with special glues
- Crazing of plastic minimized as high quality plastic tolerates short exposure to cleaning reagents used in RNA analysis

Samples migrate in right direction due to unidirectional migration feature and colour coding

will not move sideways during comb removal

Sample migration is always straight as comb-

Closely spaced wells do not break as comb-stand

stand and tray are aligned & locked in place

# Rugged

- · Electrodes do not break as they are thick and platinum is >99.9% pure
- No electrolytic corrosion of male connector as base is resin filled
- Metal screws that do not break with extensive usage

#### **Economical**

**Error Minimization** 

- Run larger number of samples using multiple combs per tray
- Can be run at higher voltages for quicker runs and hence faster turn-around times
- Saves reagent & operator cost as leakage and errors are prevented

#### **Good Resolution**

- UV-transparent trays have more than 95% UVtransparency and gives enhanced sensitivity of **DNA** detection
- Improved band resolution as wells can be cast near the starting edge for longer running length

#### Convenient

- Multichannel micropipette compatible available
- Cast lower percentage gels as comb height can be adjusted
- Gels do not slip out in the UV-transparent gel gripping travs



# RESEARCHER RANGE HORIZONTAL GEL APPARATUS SELECTION GUIDE

| Model           | For <b>DNA</b> & protein separati on | For DNA, RNA & protei n separ ation | With coolin g and buffer circul ation | Gel size<br>Width x Length<br>(in cm) | Max.<br>no. of<br>sampl<br>es | No of<br>wells/<br>comb<br>(in ready<br>to use<br>system) | Max. no.<br>of wells/<br>comb<br>availabl<br>e | Recommen<br>ded power<br>supply* |
|-----------------|--------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|-------------------------------|---|--|----------------------------------|
| SLEEKSUB        | Y                                    | -                                   | -                                     | 7 x 5<br>7 x 10                       | 120                           | 10  | 20   | Electragel -                     |
| SLEEKSUB-R      | Y                                    | Y                                   | -                                     | 7 x 15                                | 120                           | 10  | 20   | 100                              |
| GELMARINER      | Y                                    | -                                   | -                                     | 10 x 5                                |                               |   |  |                                  |
| GELMARINER-R    | Υ                                    | Y                                   | -                                     | 10 x 10<br>10 x 15                    | 240                           | 15  | 30   | Electraprime                     |
| GELMARINER-RC   | Y                                    | Υ                                   | Y                                     | 10 x 20                               |                               |   |  |                                  |
| GREYHOUND       | Y                                    | -                                   | -                                     | 15 x 5                                |                               |   |  |                                  |
| GREYHOUND-R     | Y                                    | Υ                                   | -                                     | 15 x 10<br>15 x 15<br>15 x 20         | 495                           | 24  | 45   | Electroprime                     |
| GREYHOUND-RC    | Υ                                    | Υ                                   | Y                                     | 15 x 25                               |                               | 24 45   | 45   | Electraprime                     |
| GREYHOUND-Mini  | Y                                    | Υ                                   | -                                     | 15 x 5<br>15 x 10                     | 180                           |   |  |                                  |
| SUBMARINER      | Y                                    | -                                   | -                                     | 23 x 5                                |                               |   |  |                                  |
| SUBMARINER-R    | Y                                    | Y                                   | -                                     | 23 x 10<br>23 x 15<br>23 x 20         | 770                           |   |  |                                  |
| SUBMARINER-RC   | Y                                    | Y                                   | Y                                     | 23 x 25                               |                               | 36  | 70   | Electracomet                     |
| SUBMARINER-Mini | Y                                    | Y                                   |                                       | 23 x 5<br>23 x 10<br>23 x 15          | 420                           |   |  |                                  |
| GREYWHALE       | Y                                    | -                                   | -                                     | 30 x 5<br>30 x 10                     |                               |   |  |                                  |
| GREYWHALE-R     | Y                                    | Y                                   | -                                     | 30 x 15<br>30 x 20                    | 1288                          |   |  |                                  |
| GREYWHALE-RC    | Υ                                    | Y                                   | Y                                     | 30 x 25<br>30 x 30                    |                               | 54  | 92   | Electracomet                     |
| GREYWHALE-Mini  | Y                                    | Υ                                   | -                                     | 30 x 5<br>30 x 10<br>30 x 15          | 552                           |   |  |                                  |

Refer to the website for the complete table

Some combs are available with well spacing compatible with multi-channel micropipettes. The number of combs per gel and wells per comb are for our standard range of products. User defined trays, combs and accessories can be custom fabricated.



<sup>-</sup>R These equipment are meant for RNA analysis as they have better tolerance to cleaning agents

<sup>-</sup>RC These equipment have provisions for cooling the gel and for buffer circulation. They are also meant for RNA analysis as they have better tolerance to cleaning agents

<sup>\*</sup> Power supply is not included in the ready-to-use system



# **SLEEKSUB**

# For DNA and protein separation

# **SLEEKSUB-R**

For RNA, DNA and protein separation

System has higher resistance to cleaning agents

- ✓ UV-transparent tray with gel gripping design
- ✓ Uni-directional migration
- √ Trays available in different lengths upto 15 cm

✓ Gel sizes: 7 (w) X 5, 10#, 15 (l) cm
 ✓ No. of samples: [1-20] x 6 combs

✓ Buffer requirement: 270 mL

#with ready-to-use system



Sleeksub

# Features of this apparatus

#### Leak-Proof

- Buffer does not leak through plastic joints as bonding is done with special glues manufactured inhouse
- Crazing of plastic minimized as high quality plastic tolerates short exposure to cleaning reagents used in RNA analysis

#### Rugged

- Electrodes do not break as they are thick and platinum is >99.9% pure
- No electrolytic corrosion of male connector as base is resin filled
- Metal screws on comb-stands that do not break with extensive usage

#### **Error Minimization**

- Wells do not break as comb-stand will not move sideways during comb removal
- Samples migrate correctly due to unidirectional migration feature & colour coding
- Sample migration is straight as combstand & tray are aligned & locked in place

# Sensitivity & Resolution

- UV-transparent tray has more than 95% UV transparency and gives enhanced sensitivity of DNA detection
- Improved band resolution as wells can be cast near the starting edge for longer running length

### **Economical**

- Run greater number of samples using two/ four combs per tray
- Can be run higher at higher voltages for quicker runs and hence faster turnaround time
- Saves reagent & operator cost as leakage and errors are prevented

08-00105

08-00102

#### Ready-to-use system includes

|    |  | For DNA & protein | For DNA, RNA & protein |
|----|--|-------------------|------------------------|
| 1. | Tank with electrodes and male connectors mounted at an angle                       | Υ                 | Υ                      |
| 2. | UV-transparent tray with gel gripping design, 7 (w) x 10 (l) cm                    | Υ                 | Υ                      |
| 3. | Comb stand with positioning pins and metal screws for adjusting comb height        | Υ                 | Υ                      |
| 4. | PMMA comb (10 wells, 1.5 mm thick)   | Υ                 | Υ                      |
| 5. | Gel slicer   | Υ                 | Υ                      |
| 6. | Niche cleaner  | Υ                 | Υ                      |
| 7. | Lid  | Υ                 | Υ                      |
| 8. | Electrical cords with male & female connectors designed for user safety (one pair) | Υ                 | Υ                      |
| 9. | Instruction manual   | Υ                 | Υ                      |



#### **Ordering description**

**Sleeksub (08-00102):** Horizontal apparatus for DNA and protein separations: with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 7 (w) x 10 (l) cm.

**Sleeksub-R** (08-00103): Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 7 (w) x 10 (l) cm.

#### **SUGGESTION**

Order along with ready-to-use system

Extra comb stands (08-07870), Gel-casting chamber (08-25152), Extra combs, Extra Trays

# Sleeksub and its spares and accessories

| Item Description  | Cat. No. | Unit   |
|---|----------|--------|
| Sleeksub, ready-to-use system   | 08-00102 | System |
| Sleeksub-R, ready-to-use system   | 08-00105 | System |
| UV-opaque tray [gel size 7 (w) x 5 (l) cm]  | 08-02051 | Piece  |
| UV-transparent tray of gel gripping design [gel size 7 (w) x 5 (l) cm]                        | 08-02052 | Piece  |
| UV-opaque tray [gel size 7 (w) x 10 (l) cm]   | 08-02101 | Piece  |
| UV-transparent tray of gel gripping design [gel size 7 (w) x 10 (l) cm]                       | 08-02102 | Piece  |
| UV-opaque tray [gel size 3 (w) x 5 (l) cm]  | 08-03051 | Piece  |
| UV-transparent tray of gel gripping design [gel size 3 (w) x 5 (l) cm]                        | 08-03052 | Piece  |
| UV-opaque tray [gel size 3 (w) x 10 (l) cm]   | 08-03101 | Piece  |
| UV-transparent tray of gel gripping design [gel size 3 (w) x 10 (l) cm]                       | 08-02104 | Piece  |
| UV-opaque tray [gel size 7 (w) x 15 (l) cm]   | 08-02151 | Piece  |
| UV-transparent tray of gel gripping design [gel size 7 (w) x15 (l) cm]                        | 08-02152 | Piece  |
| Comb stand with positioning pins and metal screws for adjusting comb height                   | 08-07870 | Piece  |
| Comb, winged, 1.5 mm thick, 4 wells/ 68 mm for Sleeksub                                       | 08-10042 | Piece  |
| Comb 1 mm thick, PMMA, 10 wells/ 68 mm  | 08-09101 | Piece  |
| Comb 1.5 mm thick, PMMA, 10 wells/ 68 mm  | 08-09102 | Piece  |
| Comb 2 mm thick, PMMA, 10 wells/ 68 mm  | 08-09103 | Piece  |
| Comb 1 mm thick, PMMA, 13 wells/ 68 mm  | 08-09131 | Piece  |
| Comb 1.5 mm thick, PMMA, 13 wells/ 68 mm  | 08-09132 | Piece  |
| Comb 2 mm thick, PMMA, 13 wells/ 68 mm  | 08-09133 | Piece  |
| Comb 1 mm thick, multichannel pipette compatible, PMMA, 15 wells/ 68 mm                       | 08-09151 | Piece  |
| Comb 1.5 mm thick, multichannel pipette compatible, PMMA, 15 wells/ 68 mm                     | 08-09152 | Piece  |
| Comb 2 mm thick, multichannel pipette compatible, PMMA, 15 wells/ 68 mm                       | 08-09153 | Piece  |
| Comb 1 mm thick, PMMA, 16 wells/ 68 mm  | 08-09161 | Piece  |
| Comb 1.5 mm thick, PMMA, 16 wells/ 68 mm  | 08-09162 | Piece  |
| Comb 2 mm thick, PMMA, 16 wells/ 68 mm  | 08-09163 | Piece  |
| Comb 1 mm thick, PMMA, 20 wells/ 68 mm  | 08-09201 | Piece  |
| Comb 1.5 mm thick, PMMA, 20 wells/ 68 mm  | 08-09202 | Piece  |
| Comb 2 mm thick, PMMA, 20 wells/ 68 mm  | 08-09203 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 1 wells/ 68 mm for Sleeksub                           | 08-PS101 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 2 wells, ladder in the centre/ 68 mm for Sleeksub     | 08-PM102 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 2 wells, ladder at the end/ 68 mm for Sleeksub        | 08-PS102 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 4 wells, ladder in the centre/ 68 mm for Sleeksub     | 08-PM104 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 4 wells, ladder at the end/ 68 mm for Sleeksub        | 08-PS104 | Piece  |
| Gel casting chamber for tray 7 cm (w) and varying length upto 15 cm                           | 08-25152 | Piece  |
| Screws for gel casting chamber (2 No.)  | 08-26088 | Packet |
| Gel slicer, breakage resistant, 6.5 (w) x 15 (l) cm   | 63-05150 | Piece  |
| Niche cleaner   | 64-06075 | Piece  |
| Electrical cords with male & female connectors designed for user safety                       | 66-40124 | Pair   |
| Penta-legged levelling table (21 x 21 cm) with spirit-level                                   | 69-41219 | Set    |
| Sleeksub tank. Replacement part for horizontal apparatus for DNA & protein separations        | 08-01102 | Piece  |
| Sleeksub-R tank. Replacement part for horizontal apparatus for DNA, RNA & protein separations | 08-01105 | Piece  |
| Sleeksub lid. Replacement part for horizontal apparatus for DNA & protein separations         | 08-07100 | Piece  |



# **GELMARINER**

For DNA and protein separation

# **GELMARINER-R**

For RNA, DNA and protein separation

System has higher resistance to cleaning agents

# **GELMARINER-RC**

For RNA, DNA and protein separation

System has higher resistance to cleaning agents with ports for cooling and buffer solution

- ✓ UV-transparent tray with gel gripping design
- ✓ Uni-directional migration
- √ Tray available in different lengths upto 20 cm

✓ Gel sizes: 10 (w) X 10, 15#, 20 (l) cm
 ✓ No. of samples: [1-30] x 8 combs

✓ Buffer requirement: 400 mL

#with ready-to-use system



Gelmariner

### Features of this apparatus

#### Leak-Proof

- Buffer does not leak through plastic joints as bonding is done with special glues manufactured inhouse
- Crazing of plastic minimized as high quality plastic tolerates short exposure to cleaning reagents used in RNA analysis

#### Rugged

- Electrodes do not break as they are thick and platinum is >99.9% pure
- No electrolytic corrosion of male connector as base is resin filled
- Metal screws on comb-stands that do not break with extensive usage

#### **Error Minimization**

- Wells do not break as comb-stand will not move sideways during comb removal
- Samples migrate correctly due to unidirectional migration feature & colour coding
- Sample migration is straight as combstand & tray are aligned & locked in place

# Sensitivity & Resolution

- UV-transparent tray has more than 95% UV transparency and gives enhanced sensitivity of DNA detection
- Improved band resolution as wells can be cast near the starting edge for longer running length

10-00152

For DNA &

10-00155

For DNA, RNA For DNA, RNA

#### **Economical**

- Run greater number of samples using two/ four combs per tray
- Can be run higher at higher voltages for quicker runs and hence faster turnaround time
- Saves reagent & operator cost as leakage and errors are prevented

10-00156

#### Ready-to-use system includes

|    |  | protein | & protein | & protein with cooling |
|----|--|---------|-----------|------------------------|
| 1. | Tank with electrodes and male connectors mounted at an angle                       | Υ       | Υ         | Υ                      |
| 2. | UV-transparent tray with gel gripping design, 10 (w) x 15 (l) cm                   | Υ       | Υ         | Υ                      |
| 3. | Comb stand with positioning pins and metal screws for adjusting comb height        | Υ       | Υ         | Υ                      |
| 4. | PMMA comb (15 wells, 1.5 mm thick)   | Υ       | Υ         | Υ                      |
| 5. | Gel slicer   | Υ       | Υ         | Υ                      |
| 6. | Niche cleaner  | Υ       | Υ         | Υ                      |
| 7. | Lid  | Υ       | Υ         | Υ                      |
| 8. | Electrical cords with male & female connectors designed for user safety (one pair) | Υ       | Υ         | Υ                      |
| 9. | Instruction manual   | Υ       | Υ         | Υ                      |



#### **Ordering description**

**Gelmariner (10-00152):** Horizontal apparatus for DNA and protein separations: with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 10 (w) x 15 (l) cm.

**Gelmariner-R** (10-00155): Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 10 (w)  $\times$  15 (l) cm.

### SUGGESTION

Order along with ready-to-use system

Extra comb stand (10-07116), Gel-casting chamber (10-25202), Extra combs, Extra trays

**Gelmariner-RC (10-00156)**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, ports for cooling and buffer circulation, gel size 10 (w) x 15 (l) cm.

### Gelmariner and its spares and accessories

| Item Description  | Cat. No. | Unit   |
|---|----------|--------|
| Gelmariner, ready-to-use system   | 10-00152 | System |
| Gelmariner-R, ready-to-use system   | 10-00155 | System |
| Gelmariner-RC, ready-to-use system  | 10-00156 | System |
| UV-opaque tray [gel size 10 (w) x 5 (l) cm]                                     | 10-02051 | Piece  |
| UV-transparent tray of gel gripping design [gel size 10 (w) x 5 (l) cm]         | 10-02052 | Piece  |
| UV-opaque tray [gel size 10 (w) x 10 (l) cm]                                    | 10-02101 | Piece  |
| UV-transparent tray of gel gripping design [gel size 10 (w) x 10 (l) cm]        | 10-02102 | Piece  |
| UV-opaque tray [gel size 10 (w) x 15 (l) cm]                                    | 10-02151 | Piece  |
| UV-transparent tray of gel gripping design [gel size 10 (w) x 15 (l) cm]        | 10-02152 | Piece  |
| UV-opaque tray [gel size 10 (w) x 20 (l) cm]                                    | 10-02201 | Piece  |
| UV-transparent tray of gel gripping design [gel size 10 (w) x 20 (l) cm]        | 10-02202 | Piece  |
| Comb stand with positioning pins and metal screws for adjusting comb height     | 10-07116 | Piece  |
| Comb 1 mm thick , PMMA, 7 wells/ 98 mm  | 10-09071 | Piece  |
| Comb 1.5 mm thick , PMMA, 7 wells/ 98 mm  | 10-09072 | Piece  |
| Comb 2 mm thick , PMMA, 7 wells/ 98 mm  | 10-09073 | Piece  |
| Comb 1 mm thick multichannel pipette compatible, PMMA, 10 wells/ 98 mm          | 10-09101 | Piece  |
| Comb 1.5 mm thick multichannel pipette compatible, PMMA, 10 wells/ 98 mm        | 10-09102 | Piece  |
| Comb 2 mm thick multichannel pipette compatible, PMMA, 10 wells/ 98 mm          | 10-09103 | Piece  |
| Comb 1 mm thick , PMMA, 15 wells/ 98 mm   | 10-09151 | Piece  |
| Comb 1.5 mm thick , PMMA, 15 wells/ 98 mm                                       | 10-09152 | Piece  |
| Comb 2 mm thick , PMMA, 15 wells/ 98 mm   | 10-09153 | Piece  |
| Comb 1 mm thick , PMMA, 16 wells/ 98 mm   | 10-09161 | Piece  |
| Comb 1.5 mm thick , PMMA, 16 wells/ 98 mm                                       | 10-09162 | Piece  |
| Comb 2 mm thick , PMMA, 16 wells/ 98 mm   | 10-09163 | Piece  |
| Comb 1 mm thick , PMMA, 21 wells/ 98 mm   | 10-09211 | Piece  |
| Comb 1.5 mm thick , PMMA, 21 wells/ 98 mm                                       | 10-09212 | Piece  |
| Comb 2 mm thick , PMMA, 21 wells/ 98 mm   | 10-09213 | Piece  |
| Comb 1 mm thick , PMMA, 24 wells/ 98 mm   | 10-09241 | Piece  |
| Comb 1.5 mm thick , PMMA, 24 wells/ 98 mm                                       | 10-09242 | Piece  |
| Comb 2 mm thick , PMMA, 24 wells/ 98 mm   | 10-09243 | Piece  |
| Comb 1 mm thick , PMMA, 30 wells/ 98 mm   | 10-09301 | Piece  |
| Comb 1.5 mm thick , PMMA, 30 wells/ 98 mm                                       | 10-09302 | Piece  |
| Comb 2 mm thick , PMMA, 30 wells/ 98 mm   | 10-09303 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 1 wells/ 98 mm                          | 10-PS101 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 2 wells, ladder in the centre/ 98 mm    | 10-PM102 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 2 wells, ladder at the end/ 98 mm       | 10-PS102 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 2 + 2 wells, ladder at both the ends/ 98 mm | 10-PS202 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 4 wells, ladder in the centre/ 98 mm    | 10-PM104 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 4 wells, ladder at the end/ 98 mm       | 10-PS104 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 2 + 4 wells, ladder at both the ends/ 98 mm | 10-PS204 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 6 wells, ladder in the centre/ 98 mm    | 10-PM106 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 1 + 6 wells, ladder at the end/ 98 mm       | 10-PS106 | Piece  |
| Comb, preparative 2 mm thick, PMMA, 2 + 6 wells, ladder at both the ends/ 98 mm | 10-PS206 | Piece  |

# RESEARCHER RANGE - HORIZONTAL GEL APPARATUS PERFORMANCE COMPARABLE TO IMPORTED EQUIPMENT



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| Item Description  | Cat. No. | Unit   |
|---|----------|--------|
| Gel casting chamber for tray 10 cm (w) and varying length up to 20 cm   | 10-25202 | Piece  |
| Screws for gel casting chamber (2 No.)  | 10-26088 | Packet |
| Gel slicer, breakage resistant, 9.5 (w) x 20 (l) cm   | 63-05200 | Piece  |
| Niche cleaner   | 64-06075 | Piece  |
| Electrical cords with male & female connectors designed for user safety   | 66-40124 | Pair   |
| Penta-legged levelling table (23 x 31 cm) with spirit-level   | 69-41319 | Set    |
| Gelmariner tank. Replacement part for horizontal apparatus for DNA and protein separations  | 10-01152 | Piece  |
| Gelmariner-R tank. Replacement part for horizontal apparatus for nucleic acid and protein separations, fabricate to tolerate cleaning reagents used in RNA analysis   | 10-01155 | Piece  |
| Gelmariner-RC tank. Replacement part for horizontal apparatus for nucleic acid and protein separations, fabricate to tolerate cleaning reagents used in RNA analysis, with ports for buffer circulation and cooling of gel for fast electrophoresis | 10-01156 | Piece  |
| Gelmariner lid. Replacement part for horizontal apparatus for DNA and protein separation.   | 10-10150 | Piece  |



# **GREYHOUND**

Gel size: 15 (w) x 5, 10, 15, 20#, 25 (l) cm

For DNA and protein separation

# **GREYHOUND-R**

Gel size: 15 (w) x 5, 10, 15, 20\*, 25 (l) cm For RNA, DNA and protein separation

System has higher resistance to cleaning agents

# **GREYHOUND-RC**

Gel size: 15 (w) x 5, 10, 15, 20\*, 25 (l) cm For RNA, DNA and protein separation

System has higher resistance to cleaning agents

with ports for cooling and buffer solution



Greyhound

# **GREYHOUND-Mini**

Gel size: 15 (w) x 5, 10# (l) cm

For RNA, DNA and protein separation

- ✓ UV-transparent tray with gel gripping design
- ✓ Uni-directional migration
- ✓ Comb with teeth spacing compatible with multi-channel micropipettes available
- √ No. of samples (standard): [1-45] x 11 combs
- √ No. of samples (mini): [1-45] x 4 combs
- ✓ Buffer requirement: 1000 mL (standard), 800 mL (mini)

#gel size with ready to use system

### Features of this apparatus

#### Leak-Proof

- Buffer does not leak through plastic joints as bonding is done with special glues manufactured inhouse
- Crazing of plastic minimized as high quality plastic tolerates short exposure to cleaning reagents used in RNA analysis

#### Rugged

- Electrodes do not break as they are thick and platinum is
   >99.9% pure
- No electrolytic corrosion of male connector as base is resin filled
- Metal screws on comb-stands that do not break with extensive usage

#### **Error Minimization**

- Wells do not break as comb-stand will not move sideways during comb removal
- Samples migrate correctly due to unidirectional migration feature & colour coding
- Sample migration is straight as combstand & tray are aligned & locked in place

# Sensitivity & Resolution

- UV-transparent tray has more than 95% UV transparency and gives enhanced sensitivity of DNA detection
- Improved band resolution as wells can be cast near the starting edge for longer running length

#### **Economical**

- Run greater number of samples using two/ four combs per tray
- Can be run higher at higher voltages for quicker runs and hence faster turnaround time
- Saves reagent & operator cost as leakage and errors are prevented



| Ready-to-use system includes  | 09-00202          | 09-00205                  | 09-00206                                  | 09-00203                  |
|---|-------------------|---------------------------|---|---------------------------|
|   | For DNA & protein | For DNA, RNA<br>& protein | For DNA, RNA<br>& protein with<br>cooling | For DNA, RNA<br>& protein |
| 1. Tank with electrodes and male connectors mounted at an angle                                     | Υ                 | Υ                         | Υ   | Υ                         |
| 2. UV-transparent tray with gel gripping design, 15 (w) x 20 (l) cm                                 | Υ                 | Υ                         | Υ   | -                         |
| 3. UV-transparent tray with gel gripping design, 15 (w) x 10 (l) cm                                 | -                 | -                         | -   | Υ                         |
| <ol> <li>Comb stand with positioning pins and metal screws for adjusting<br/>comb height</li> </ol> | Υ                 | Υ                         | Υ   | Υ                         |
| 5. PMMA comb (24 wells, 1.5 mm thick)   | Υ                 | Υ                         | Υ   | Υ                         |
| 6. Gel slicer   | Υ                 | Υ                         | Υ   | Υ                         |
| 7. Niche cleaner  | Υ                 | Υ                         | Υ   | Υ                         |
| 8. Lid  | Υ                 | Υ                         | Υ   | Υ                         |
| 9. Electrical cords with male & female connectors designed for user safety (one pair)               | Υ                 | Υ                         | Υ   | Υ                         |
| 10. Instruction manual  | Υ                 | Υ                         | Υ   | Υ                         |

#### **Ordering description**

**Greyhound (09-00202):** Horizontal apparatus for DNA and protein separations with gel gripping UV-transparent tray, male connectors mounted at an angle, and unidirectional migration, gel size 15 (w) x 20 (l) cm.

**Greyhound-R (09-00205)**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 15(w) x 20 (l) cm.

#### **SUGGESTION**

Order along with ready-to-use system

Extra comb stands (09-07171), Gel-casting chamber (09-25252), Extra combs & Extra Trays

**Greyhound-RC (09-00206)**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, ports for cooling and buffer circulation, gel size 15(w) x 20 (I) cm.

**Greyhound-Mini (09-00203):** Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle, and uni-directional migration, gel size 15 (w) x 10 (l) cm.

#### **Greyhound and its spares and accessories**

| Item Description  | Cat. No. | Unit   |
|---|----------|--------|
| Greyhound, ready-to-use system  | 09-00202 | System |
| Greyhound-R, ready-to-use system  | 09-00205 | System |
| Greyhound-RC, ready-to-use system   | 09-00206 | System |
| Greyhound-Mini, ready-to-use system   | 09-00203 | System |
| UV-opaque tray [gel size 15 (w) x 5 (l) cm]   | 09-02051 | Piece  |
| UV-transparent tray of gel gripping design [gel size 15 (w) x 5 (l) cm]                             | 09-02052 | Piece  |
| UV-opaque tray [gel size 15 (w) x 10 (l) ]  | 09-02101 | Piece  |
| UV-transparent tray of gel gripping design [gel size 15 (w) x 10 (l) ]                              | 09-02102 | Piece  |
| UV-opaque tray [gel size 15 (w) x 15 (l) cm]  | 09-02151 | Piece  |
| UV-transparent tray of gel gripping design [gel size 15 (w) x 15 (l) cm]                            | 09-02152 | Piece  |
| UV-opaque tray [gel size 15 (w) x 20 (l) cm]  | 09-02201 | Piece  |
| UV-transparent tray of gel gripping design [gel size 15 (w) x 20 (l) cm]                            | 09-02202 | Piece  |
| UV-opaque tray [size 15 (w) x 25 (l) cm]gel   | 09-02251 | Piece  |
| UV-transparent tray of gel gripping design [gel size 15 (w) x 25 (l) cm]                            | 09-02252 | Piece  |
| UV-opaque tray [size 15 (w) x 22 (l) cm stringed at 2.5 cm intervals] and replacement lid for paper | 09-02223 | Set    |
| electrophoresis   |          |        |
| Comb stand with positioning pins and metal screws for adjusting comb height                         | 09-07171 | Piece  |
| Comb 1 mm thick , PMMA, 12 wells/ 148 mm  | 09-09121 | Piece  |
| Comb 1.5 mm thick , PMMA, 12 wells/ 148 mm  | 09-09122 | Piece  |
| Comb 2 mm thick , PMMA, 12 wells/ 148 mm  | 09-09123 | Piece  |
| Comb 1 mm thick ,multichannel pipette compatible, PMMA, 17 wells/ 148 mm                            | 09-09171 | Piece  |
| Comb 1.5 mm thick ,multichannel pipette compatible, PMMA, 17 wells/ 148 mm                          | 09-09172 | Piece  |
| Comb 2 mm thick ,multichannel pipette compatible, PMMA, 17 wells/ 148 mm                            | 09-09173 | Piece  |
| Comb 1 mm thick , PMMA, 24 wells/ 148 mm  | 09-09241 | Piece  |
| Comb 1.5 mm thick , PMMA, 24 wells/ 148 mm  | 09-09242 | Piece  |
| Comb 2 mm thick , PMMA, 24 wells/ 148 mm  | 09-09243 | Piece  |
| Comb 1 mm thick , PMMA, 28 wells/ 148 mm  | 09-09281 | Piece  |
| Comb 1.5 mm thick , PMMA, 28 wells/ 148 mm  | 09-09282 | Piece  |
| Comb 2 mm thick , PMMA, 28 wells/ 148 mm  | 09-09283 | Piece  |
| Comb 1 mm thick ,multichannel pipette compatible, PMMA, 33 wells/ 148 mm                            | 09-09331 | Piece  |



|  | www.ted  | chnosource |
|--|----------|------------|
| Item Description   | Cat. No. | Unit       |
| Comb 1.5 mm thick ,multichannel pipette compatible, PMMA, 33 wells/ 148 mm                       | 09-09332 | Piece      |
| Comb 2 mm thick ,multichannel pipette compatible, PMMA, 33 wells/ 148 mm                         | 09-09333 | Piece      |
| Comb 1 mm thick, PMMA, 36 wells/ 148 mm  | 09-09361 | Piece      |
| Comb 1.5 mm thick, PMMA, 36 wells/ 148 mm  | 09-09362 | Piece      |
| Comb 2 mm thick, PMMA, 36 wells/ 148 mm  | 09-09363 | Piece      |
| Comb 1 mm thick, PMMA, 45 wells/ 148 mm  | 09-09451 | Piece      |
| Comb 1.5 mm thick, PMMA, 45 wells/ 148 mm  | 09-09452 | Piece      |
| Comb 2 mm thick, PMMA, 45 wells/ 148 mm  | 09-09453 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 1 wells/ 148 mm  | 09-PS101 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 2 wells, ladder in the centre/ 148 mm                    | 09-PM102 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 2 wells, ladder at the end/ 148 mm                       | 09-PS102 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 2 + 2 wells, ladder at both the ends/ 148 mm                 | 09-PS202 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 4 wells, ladder in the centre/ 148 mm                    | 09-PM104 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 4 wells, ladder at the end/ 148 mm                       | 09-PS104 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 2 + 4 wells, ladder at both the ends/ 148 mm                 | 09-PS204 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 6 wells, ladder in the centre/ 148 mm                    | 09-PM106 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 6 wells, ladder at the end/ 148 mm                       | 09-PS106 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 2 + 6 wells, ladder at both the ends/ 148 mm                 | 09-PS206 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 8 wells, ladder in the centre/ 148 mm                    | 09-PM108 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 8 wells, ladder at the end/ 148 mm                       | 09-PS108 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 2 + 8 wells, ladder at both the ends/ 148 mm                 | 09-PS208 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 10 wells, ladder in the centre/ 148 mm                   | 09-PM110 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 1 + 10 wells, ladder at the end/ 148 mm                      | 09-PS110 | Piece      |
| Comb, preparative 2 mm thick, PMMA, 2 + 10 wells, ladder at both the ends/ 148 mm                | 09-PS210 | Piece      |
| Gel casting chamber for tray 15 cm (w) and varying length up to 25 cm                            | 09-25252 | Piece      |
| Screws for gel casting chamber (2 No.)   | 09-26088 | Packet     |
| Gel slicer, breakage resistant, 14.5 (w) x 25 (l) cm   | 63-05250 | Piece      |
| Niche cleaner  | 64-06075 | Piece      |
| Electrical cords with male & female connectors designed for user safety                          | 66-40124 | Pair       |
| Penta-legged levelling table (28 x 45 cm) with spirit-level                                      | 69-41459 | Set        |
| Greyhound tank. Replacement part for horizontal apparatus for DNA and protein separations        | 09-01202 | Piece      |
| Greyhound-R tank. Replacement part for horizontal apparatus for nucleic acid and protein         | 00 04005 | Diago      |
| separations, fabricate to tolerate cleaning reagents used in RNA analysis                        | 09-01205 | Piece      |
| Greyhound-RC tank. Replacements part for horizontal apparatus for nucleic acid and protein       |          |            |
| separations, fabricate to tolerate cleaning reagents used in RNA analysis, with ports for buffer | 09-01206 | Piece      |
| circulation and cooling of gel for fast electrophoresis  |          |            |
| Greyhound-mini tank. Replacement part for horizontal apparatus for DNA and protein separations   | 09-01203 | Piece      |
| Greyhound lid. Replacement part for horizontal apparatus for DNA and protein separation          | 09-15200 | Piece      |
| Greyhound-mini lid. Replacement part for horizontal apparatus for DNA and protein separation     | 09-15201 | Piece      |



# **SUBMARINER**

Gel size: 23 (w) x 5, 10, 15, 20#, 25 (l) cm

For DNA and protein separation

#### SUBMARINER-R

Gel size: 23 (w) x 5, 10, 15, 20\*, 25 (l) cm For RNA, DNA and protein separation

System has higher resistance to cleaning agents

# SUBMARINER-RC

Gel size: 23 (w) x 5, 10, 15, 20\*, 25 (l) cm For RNA, DNA and protein separation

System has higher resistance to cleaning agents with ports for

cooling and buffer solution



Submariner (representational image)

# **SUBMARINER-Mini**

Gel size: 23 (w) x 5, 10, 15# (l) cm For RNA, DNA and protein separation

- ✓ UV-transparent tray with gel gripping design
- ✓ Uni-directional migration
- ✓ Comb with teeth spacing compatible with multi-channel micropipettes available
- √ No. of samples (standard): [1-70] x 11 combs
- √ No. of samples (mini): [1-70] x 6 combs
- ✓ Buffer requirement: 1800 mL (standard), 1000 mL (mini)

#gel size with ready-to-use system

#### Features of this apparatus

# Leak-Proof

- Buffer does not leak through plastic joints as bonding is done with special glues manufactured inhouse
- Crazing of plastic minimized as high quality plastic tolerates short exposure to cleaning reagents used in RNA analysis

# Rugged

- Electrodes do not break as they are thick and platinum is >99.9% pure
- No electrolytic corrosion of male connector as base is resin filled
- Metal screws on comb-stands that do not break with extensive usage

#### **Error Minimization**

- Wells do not break as comb-stand will not move sideways during comb removal
- Samples migrate correctly due to unidirectional migration feature & colour coding
- Sample migration is straight as combstand & tray are aligned & locked in place

# Sensitivity & Resolution

- UV-transparent tray has more than 95% UV transparency and gives enhanced sensitivity of DNA detection
- Improved band resolution as wells can be cast near the starting edge for longer running length

# **Economical**

- Run greater number of samples using two/ four combs per tray
- Can be run higher at higher voltages for quicker runs and hence faster turnaround time
- Saves reagent & operator cost as leakage and errors are prevented



**SUGGESTION** 

Order along with ready-to-use system

Extra Comb stands (17-07171), Gel-casting chamber (17-252<u>52),</u>

Extra combs, Extra trays

www.technosource.in

|            | Ready-to-use system includes   |           |              | *************************************** | v.teerii iosodi ee. |
|------------|--|-----------|--------------|---|---------------------|
| <u> 10</u> | teauy-to-use system moludes  | 17-00232  | 17-00235     | 17-00236                                | 17-00233            |
|            |  | For DNA & | For DNA, RNA | For DNA, RNA                            | For DNA, RNA        |
|            |  | protein   | & protein    | & protein with                          | & protein           |
|            |  |           |              | cooling                                 |                     |
| 1.         | Tank with electrodes and male connectors mounted at an angle                       | Υ         | Y            | Υ                                       | Υ                   |
| 2.         | UV-transparent tray with gel gripping design, 23 (w) x 20 (l) cm                   | Υ         | Υ            | Υ                                       | -                   |
| 3.         | UV-transparent tray with gel gripping design, 23 (w) x 15 (l) cm                   | -         | -            | -                                       | Υ                   |
| 4.         | Comb stand with positioning pins and metal screws for adjusting comb height        | Υ         | Υ            | Υ                                       | Υ                   |
| 5.         | PMMA comb (54 wells, 1.5 mm thick)   | Υ         | Υ            | Υ                                       | Υ                   |
| 6.         | Gel slicer   | Υ         | Υ            | Υ                                       | Υ                   |
| 7.         | Niche cleaner  | Υ         | Υ            | Υ                                       | Υ                   |
| 8.         | Lid  | Υ         | Υ            | Υ                                       | Υ                   |
| 9.         | Electrical cords with male & female connectors designed for user safety (one pair) | Υ         | Υ            | Υ                                       | Υ                   |
| 10.        | Instruction manual   | Υ         | Υ            | Υ                                       | Υ                   |

# **Ordering description**

**Submariner (17-00232)**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, gel size 23 (w) x 25 (l) cm.

**Submariner-R (17-00235)**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel

gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, gel size 23 (w) x 25 (l) cm.

**Submariner-RC** (17-00236): Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, ports for cooling and buffer circulation, gel size 23 (w) x 25 (l) cm.

**Submariner-mini** (17-00233): Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, ports for cooling and buffer circulation, gel size 23 (w) x 15 (l) cm.

#### Submariner and its spares and accessories

| Item Description  | Cat. No. | Unit   |
|---|----------|--------|
| Submariner, ready-to-use system   | 17-00232 | System |
| Submariner-R, ready-to-use system   | 17-00235 | System |
| Submariner-RC, ready-to-use system  | 17-00236 | System |
| Submariner-mini, ready-to-use system  | 17-00233 | System |
| UV-opaque tray [gel size 23 (w) x 5 (l) cm]                                 | 17-02051 | Piece  |
| UV-transparent tray of gel gripping design [gel size 23 (w) x 5 (l) cm]     | 17-02052 | Piece  |
| UV-opaque tray [gel size 23 (w) x 10 (l) cm]                                | 17-02101 | Piece  |
| UV-transparent tray of gel gripping design [gel size 23 (w) x 10 (l) cm]    | 17-02102 | Piece  |
| UV-opaque tray [gel size 23 (w) x 15 (l) cm]                                | 17-02151 | Piece  |
| UV-transparent tray of gel gripping design [gel size 23 (w) x 15 (l) cm]    | 17-02152 | Piece  |
| UV-opaque tray [gel size 23 (w) x 20 (l) cm]                                | 17-02201 | Piece  |
| UV-transparent tray of gel gripping design [gel size 23 (w) x 20 (l) cm]    | 17-02202 | Piece  |
| Comb stand with positioning pins and metal screws for adjusting comb height | 17-07171 | Piece  |
| Comb 1 mm thick , PMMA, 17 wells/228 mm                                     | 17-09171 | Piece  |
| Comb 1.5 mm thick , PMMA, 17 wells/ 228 mm                                  | 17-09172 | Piece  |
| Comb 2 mm thick , PMMA, 17 wells/ 228 mm                                    | 17-09173 | Piece  |
| Comb 1 mm thick, multichannel pipette compatible, PMMA, 26 wells/228 mm     | 17-09261 | Piece  |
| Comb 1.5 mm thick , multichannel pipette compatible, PMMA, 26 wells/228 mm  | 17-09262 | Piece  |
| Comb 2 mm thick, multichannel pipette compatible, PMMA, 26 wells/228 mm     | 17-09263 | Piece  |
| Comb 1 mm thick , PMMA, 37 wells/228 mm                                     | 17-09371 | Piece  |
| Comb 1.5 mm thick , PMMA, 37 wells/ 228 mm                                  | 17-09372 | Piece  |
| Comb 2 mm thick , PMMA, 37 wells/ 228 mm                                    | 17-09373 | Piece  |
| Comb 1 mm thick , PMMA, 40 wells/228 mm                                     | 17-09401 | Piece  |
| Comb 1.5 mm thick , PMMA, 40 wells/ 228 mm                                  | 17-09402 | Piece  |
| Comb 2 mm thick , PMMA, 40 wells/ 228 mm                                    | 17-09403 | Piece  |



|  | www.ted  | chnosource. |
|--|----------|-------------|
| Item Description   | Cat. No. | Unit        |
| Comb 1 mm thick , multichannel pipette compatible, PMMA, 50 wells/228 mm                         | 17-09501 | Piece       |
| Comb 1.5 mm thick , multichannel pipette compatible, PMMA, 50 wells/228 mm                       | 17-09502 | Piece       |
| Comb 2 mm thick, multichannel pipette compatible, PMMA, 50 wells/228 mm                          | 17-09503 | Piece       |
| Comb 1 mm thick , PMMA, 70 wells/228 mm  | 17-09701 | Piece       |
| Comb 1.5 mm thick , PMMA, 70 wells/ 228 mm   | 17-09702 | Piece       |
| Comb 2 mm thick , PMMA, 70 wells/ 228 mm   | 17-09703 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 1 wells/ 228 mm  | 17-PS101 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 2 wells, ladder in the centre/ 228 mm                    | 17-PM102 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 2 wells, ladder at the end/ 228 mm                       | 17-PS102 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 2 + 2 wells, ladder at both the ends/ 228 mm                 | 17-PS202 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 4 wells, ladder in the centre/ 228 mm                    | 17-PM104 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 4 wells, ladder at the end/ 228 mm                       | 17-PS104 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 2 + 4 wells, ladder at both the ends/ 228 mm                 | 17-PS204 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 6 wells, ladder in the centre/ 228 mm                    | 17-PM106 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 6 wells, ladder at the end/ 228 mm                       | 17-PS106 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 2 + 6 wells, ladder at both the ends/ 228 mm                 | 17-PS206 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 8 wells, ladder in the centre/ 228 mm                    | 17-PM108 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 8 wells, ladder at the end/ 228 mm                       | 17-PS108 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 2 + 8 wells, ladder at both the ends/ 228 mm                 | 17-PS208 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 10 wells, ladder in the centre/ 228 mm                   | 17-PM110 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 1 + 10 wells, ladder at the end/ 228 mm                      | 17-PS110 | Piece       |
| Comb, preparative 2 mm thick, PMMA, 2 + 10 wells, ladder at both the ends/ 228 mm                | 17-PS210 | Piece       |
| Gel casting chamber for tray 23 cm (w) and varying length up to 25 cm                            | 17-25252 | Piece       |
| Screws for gel casting chamber (2 No.)   | 17-26088 | Packet      |
| Gel slicer, breakage resistant, 22.5 (w) x 25 (l) cm   | 63-05270 | Piece       |
| Niche cleaner  | 64-06075 | Piece       |
| Electrical cords with male & female connectors designed for user safety                          | 66-40124 | Pair        |
| Penta-legged levelling table (28 x 45 cm) with spirit-level                                      | 69-41459 | Set         |
| Submariner tank. Replacement part for horizontal apparatus for DNA and protein separations       | 17-01232 | Piece       |
| Submariner-R tank. Replacement part for horizontal apparatus for nucleic acid and protein        | 17-01235 | Piece       |
| separations, fabricate to tolerate cleaning reagents used in RNA analysis                        | 17 01200 | 1 1000      |
| Submariner-RC tank. Replacement part for horizontal apparatus for nucleic acid and protein       |          |             |
| separations, fabricate to tolerate cleaning reagents used in RNA analysis, with ports for buffer | 17-01236 | Piece       |
| circulation and cooling of gel for fast electrophoresis  |          |             |
| Submariner-mini tank. Replacement part for horizontal apparatus for DNA and protein              | 17-01233 | Piece       |
| separations  |          |             |
| Submariner lid. Replacement part for horizontal apparatus for DNA and protein separation         | 17-12320 | Piece       |
| Submariner-mini lid. Replacement part for horizontal apparatus for DNA and protein separation    | 17-12321 | Piece       |



# **GREYWHALE**

Gel size: 30 (w) x 5, 10, 15, 20, 25, 30# (l) cm

For DNA and protein separation

#### **GREYWHALE-R**

Gel size: 30 (w) x 5, 10, 15, 20, 25, 30# (I) cm For RNA, DNA and protein separation

System has higher resistance to cleaning agents

# **GREYWHALE-RC**

Gel size: 30 (w) x 5, 10, 15, 20, 25, 30# (l) cm For RNA, DNA and protein separation

System has higher resistance to cleaning agents with ports for cooling and buffer solution



Greywhale (representational image)

# **GREYWHALE-Mini**

Gel size: 30 (w) x 5, 10, 15# (l) cm For RNA, DNA and protein separation

- ✓ UV-transparent tray with gel gripping design
- ✓ Uni-directional migration
- ✓ Comb with teeth spacing compatible with multi-channel micropipettes available
- √ No. of samples (standard): [1-92] x 14 combs
- √ No. of samples (mini): [1-92] x 6 combs
- ✓ Buffer requirement: 2000 mL (standard), 1500 mL (mini)

#gel size with ready-to-use system

#### Features of this apparatus

#### Leak-Proof

- Buffer does not leak through plastic joints as bonding is done with special glues manufactured inhouse
- Crazing of plastic minimized as high quality plastic tolerates short exposure to cleaning reagents used in RNA analysis

# Rugged

- Electrodes do not break as they are thick and platinum is >99.9% pure
- No electrolytic corrosion of male connector as base is resin filled
- Metal screws on comb-stands that do not break with extensive usage

#### **Error Minimization**

- Wells do not break as comb-stand will not move sideways during comb removal
- Samples migrate correctly due to unidirectional migration feature & colour coding
- Sample migration is straight as combstand & tray are aligned & locked in place

### Sensitivity & Resolution

- UV-transparent tray has more than 95% UV transparency and gives enhanced sensitivity of DNA detection
- Improved band resolution as wells can be cast near the starting edge for longer running length

### **Economical**

- Run greater number of samples using two/ four combs per tray
- Can be run higher at higher voltages for quicker runs and hence faster turnaround time
- Saves reagent & operator cost as leakage and errors are prevented



| _        |  | Y Y Y g comb Y |           |   |           |
|----------|--|--|-----------|---|-----------|
| <u>F</u> | Ready-to-use system includes   |  |           |   |           |
|          |  | protein  | & protein |   | & protein |
| 1.       | Tank with electrodes and male connectors mounted at an angle                       | Υ  | Υ         | Υ | Υ         |
| 2.       | UV-transparent tray with gel gripping design, 30 (w) x 30 (l) cm                   | Υ  | Υ         | Υ | -         |
| 3.       | UV-transparent tray with gel gripping design, 30 (w) x 15 (l) cm                   | -  | -         | - | Υ         |
| 4.       | Comb stand with positioning pins and metal screws for adjusting comb height        | Υ  | Υ         | Υ | Υ         |
| 5.       | PMMA comb (54 wells, 1.5 mm thick)   | Υ  | Υ         | Υ | Υ         |
| 6.       | Gel slicer   | Υ  | Υ         | Υ | Υ         |
| 7.       | Niche cleaner  | Υ  | Υ         | Υ | Υ         |
| 8.       | Lid  | Υ  | Υ         | Υ | Υ         |
| 9.       | Electrical cords with male & female connectors designed for user safety (one pair) | Υ  | Υ         | Υ | Υ         |
| 10.      | Instruction manual   | Υ  | Υ         | Υ | Υ         |

#### **Ordering description**

**Greywhale (12-00302)**: Horizontal apparatus for DNA and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, gel size 30 (w)  $\times$  30 (l) cm.

**Greywhale-R (12-00305)**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel

gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, gel size 30 (w) x 30 (l) cm.

#### **SUGGESTION**

Order along with ready-to-use system

Extra Comb stands (12-07171), Gel-casting chamber (12-25302), Extra combs, Extra trays

**Greywhale-RC (12-00306)**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, ports for cooling and buffer circulation, gel size 30 (w) x 30 (l) cm.

**Greywhale-mini (12-00303)**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, gel size 30 (w) x 15 (l) cm.

#### **Greywhale and its spares and accessories**

| Item Description   | Cat. No. | Unit   |
|--|----------|--------|
| Greywhale, ready-to-use system   | 12-00302 | System |
| Greywhale-R, ready-to-use system   | 12-00305 | System |
| Greywhale-RC, ready-to-use system  | 12-00306 | System |
| Greywhale-mini, ready-to-use system                                      | 12-00303 | System |
| UV-opaque tray [gel size 25 (w) x 5 (l) cm]                              | 12-03051 | Piece  |
| UV-transparent tray of gel gripping design [gel size 25 (w) x 5 (l) cm]  | 12-03052 | Piece  |
| UV-opaque tray [gel size 25 (w) x 10 (l) cm]                             | 12-03101 | Piece  |
| UV-transparent tray of gel gripping design [gel size 25 (w) x 10 (l) cm] | 12-03102 | Piece  |
| UV-opaque tray [gel size 25 (w) x 15 (l) cm]                             | 12-03151 | Piece  |
| UV-transparent tray of gel gripping design [gel size 25 (w) x 15 (l) cm] | 12-03152 | Piece  |
| UV-opaque tray [gel size 25 (w) x 20 (l) cm]                             | 12-03201 | Piece  |
| UV-transparent tray of gel gripping design [gel size 25 (w) x 20 (l) cm] | 12-03202 | Piece  |
| UV-opaque tray [gel size 25 (w) x 25 (l) cm]                             | 12-03251 | Piece  |
| UV-transparent tray of gel gripping design [gel size 25 (w) x 25 (l) cm] | 12-03252 | Piece  |
| UV-opaque tray [gel size 25 (w) x 30 (l) cm]                             | 12-03301 | Piece  |
| UV-transparent tray of gel gripping design [gel size 25 (w) x 30 (l) cm] | 12-03302 | Piece  |
| UV-opaque tray [gel size 30 (w) x 5 (l) cm]                              | 12-02051 | Piece  |
| UV-transparent tray of gel gripping design [gel size 30 (w) x 5 (l) cm]  | 12-02052 | Piece  |
| UV-opaque tray [gel size 30 (w) x 10 (l) cm]                             | 12-02101 | Piece  |
| UV-transparent tray of gel gripping design [gel size 30 (w) x 10 (l) cm] | 12-02102 | Piece  |
| UV-opaque tray [gel size 30 (w) x 15 (l) cm]                             | 12-02151 | Piece  |
| UV-transparent tray of gel gripping design [gel size 30 (w) x 15 (l) cm] | 12-02152 | Piece  |
| UV-opaque tray [gel size 30 (w) x 20 (l) cm]                             | 12-02201 | Piece  |



|  |          | chnosource |
|--|----------|------------|
| Item Description   | Cat. No. | Unit       |
| UV-transparent tray of gel gripping design [gel size 30 (w) x 20 (l) cm]                         | 12-02202 | Piece      |
| UV-opaque tray [gel size 30 (w) x 25 (l) cm]   | 12-02251 | Piece      |
| UV-transparent tray of gel gripping design [gel size 30 (w) x 25 (l) cm]                         | 12-02252 | Piece      |
| UV-opaque tray [gel size 30 (w) x 30 (l) cm]   | 12-02301 | Piece      |
| UV-transparent tray of gel gripping design [gel size 30 (w) x 30 (l) cm]                         | 12-02302 | Piece      |
| Comb stand with positioning pins and metal screws for adjusting comb height                      | 12-07171 | Piece      |
| Comb 1 mm thick, multichannel pipette compatible, PMMA, 33 wells/298 mm                          | 12-09331 | Piece      |
| Comb 1.5 mm thick, multichannel pipette compatible, PMMA, 33 wells/298 mm                        | 12-09332 | Piece      |
| Comb 2 mm thick, multichannel pipette compatible, PMMA, 33 wells/298 mm                          | 12-09333 | Piece      |
| Comb 1 mm thick , PMMA, 54 wells/298 mm  | 12-09541 | Piece      |
| Comb 1.5 mm thick , PMMA, 54 wells/ 298 mm   | 12-09542 | Piece      |
| Comb 2 mm thick , PMMA, 54 wells/ 298 mm   | 12-09543 | Piece      |
| Comb 1 mm thick, multichannel pipette compatible, PMMA, 65 wells/298 mm                          | 12-09651 | Piece      |
| Comb 1.5 mm thick, multichannel pipette compatible, PMMA, 65 wells/298 mm                        | 12-09652 | Piece      |
| Comb 2 mm thick, multichannel pipette compatible, PMMA, 65 wells/298 mm                          |          | Piece      |
|  | 12-09653 |            |
| Comb 1 mm thick, PMMA, 92 wells/298 mm   | 12-09921 | Piece      |
| Comb 1.5 mm thick , PMMA, 92 wells/ 298 mm   | 12-09922 | Piece      |
| Comb 2 mm thick , PMMA, 92 wells/ 298 mm   | 12-09923 | Piece      |
| Comb 1 mm thick , multichannel pipette compatible, PMMA, 27 wells/298 mm                         | 12-10271 | Piece      |
| Comb 1.5 mm thick , multichannel pipette compatible, PMMA, 27 wells/298 mm                       | 12-10272 | Piece      |
| Comb 2 mm thick , multichannel pipette compatible, PMMA, 27 wells/298 mm                         | 12-10273 | Piece      |
| Comb 1 mm thick , PMMA, 40 wells/298 mm  | 12-10401 | Piece      |
| Comb 1.5 mm thick , PMMA, 40 wells/ 298 mm   | 12-10402 | Piece      |
| Comb 2 mm thick , PMMA, 40 wells/ 298 mm   | 12-10403 | Piece      |
| Comb 1 mm thick , multichannel pipette compatible, PMMA, 54 wells/298 mm                         | 12-10541 | Piece      |
| Comb 1.5 mm thick , multichannel pipette compatible, PMMA, 54 wells/298 mm                       | 12-10542 | Piece      |
| Comb 2 mm thick , multichannel pipette compatible, PMMA, 54 wells/298 mm                         | 12-10543 | Piece      |
| Comb 1 mm thick , PMMA, 76 wells/298 mm  | 12-10761 | Piece      |
| Comb 1.5 mm thick , PMMA, 76 wells/ 298 mm   | 12-10762 | Piece      |
| Comb 2 mm thick , PMMA, 76 wells/ 298 mm   | 12-10763 | Piece      |
| Gel casting chamber for tray 30 cm (w) and varying length up to 30 cm                            | 12-25302 | Piece      |
| Screws for gel casting chamber (2 No.)   | 12-26088 | Packet     |
| Gel slicer, breakage resistant, 29.5 (w) x 30 (l) cm   | 63-05300 | Piece      |
| Niche cleaner  | 64-06075 | Piece      |
| Electrical cords with male & female connectors designed for user safety                          | 66-40124 | Pair       |
| Penta-legged levelling table (38 x 52 cm) with spirit-level                                      | 69-41529 | Set        |
| Greywhale tank. Replacement part for horizontal apparatus for DNA and protein separations        | 12-01302 | Piece      |
| Greywhale-R tank. Replacement part for horizontal apparatus for nucleic acid and protein         |          |            |
| separations, fabricate to tolerate cleaning reagents used in RNA analysis                        | 12-01305 | Piece      |
| Greywhale-RC tank. Replacement part for horizontal apparatus for nucleic acid and protein        |          |            |
| separations, fabricate to tolerate cleaning reagents used in RNA analysis, with ports for buffer | 12-01306 | Piece      |
| circulation and cooling of gel for fast electrophoresis  | 12 01000 | 1 1000     |
| Greywhale-mini tank. Replacement part for horizontal apparatus for DNA and protein               |          |            |
| separations, with male connectors mounted at an angle and uni-directional migration              | 12-01303 | Piece      |
| Greywhale lid. Replacement part for horizontal apparatus for DNA and protein separation          | 12-13030 | Piece      |
| Greywhale-mini lid. Replacement part for horizontal apparatus for DNA and protein separation     | 12-13030 | Piece      |
| Oreywhale-mini liu. Nepiacement part for nonzontal apparatus for DNA and protein separation      | 12-13031 | Field      |



# **LIGOGEL**

### For DNA and protein separation

- ✓ UV-transparent tray with gel gripping design
- ✓ Built in fluorescent ruler
- ✓ Ergonomic comb
- √ Gel size: 2.8 (w) x 8.5 (l) cm
- ✓ No. of samples: [4] x 2 combs

Designed for quick electrophoresis of bio-molecules in horizontal agarose gels Use any horizontal apparatus to provide electrical conductivity or buy the Ligogel small tank.



Ligogel system with slide and comb (on top)

65-08005

#### Features of this apparatus

#### Leak-Proof

- No buffer leakage through plastic joints as bonding is done with special glues
- Crazing of plastic minimized as high quality plastic used

### Rugged

- Electrodes do not break as they are thick and platinum is >99.9% pure
- No electrolytic corrosion of male connector as base is resin filled

#### **Error Minimization**

- Closely spaced wells do not break as combstand will not move sideways during comb withdrawal
- Samples migrate in right direction due to uni-directional migration feature

# Sensitivity & Resolution

- UV-transparent tray gives enhanced sensitivity of DNA detection
- Improved band resolution as the gel formed is extremely thin

65-08001

65-\$8000

#### **Economical**

- Run greater number of samples using two combs per slide
- Can be run higher at higher voltages
- Saves reagent & operator cost as lealage and errors are prevented

65-\$8005

# Ready-to-use system includes

| _  |   | 00 00000 | 00 00001 | 00 00000  | 00 00000  |
|----|---|----------|----------|-----------|-----------|
| 1. | UV-transparent tray with gel gripping design 2.8 (w) x 8.5 (l) cm | Υ        | Υ        | Y(5 pcs)  | Y(5 pcs)  |
| 2. | A four well comb  | Υ        | Υ        | Y (5 pcs) | Y (5 pcs) |
| 3. | Instruction manual  | Υ        | Υ        | Υ         | Υ         |
| 4. | Tank with fitted electrodes                                       | Υ        | -        | -         | -         |
| 5. | Lid   | Υ        | -        | -         | -         |
| 6. | Stand for lifting Ligogel out of buffer                           | Υ        | -        | -         | -         |
| 7. | Rack for storing 5 Ligogels in the fridge                         | -        | -        | -         | Υ         |

#### **Ordering description**

Ligogel-S (65-S8000): Horizontal apparatus for DNA and protein separations with UV-transparent tray, gel size 2.8 (w) x 8.5 (l) cm, comb, PMMA for 4 wells, 1.5 mm with stand for lifting and lid for safety.

Ligogel (65-08001): Slide for DNA and protein separations (1 no.), UV-transparent, gel size 2.8 (w) x 8.5 (l) cm, comb (1 no.), PMMA for 4 wells, 1.5 mm with stand for lifting the Ligogel.

Ligogel (65-08005): Slide for DNA and protein separations (5 nos.), UV-transparent, gel size 2.8 (w) x 8.5 (l) cm, comb (5 nos.), PMMA for 4 wells 1.5 mm with stand for lifting the Ligogel

x 8.5 (I) cm, comb (5 nos.), PMMA for 4 wells, 1.5 mm with stand for lifting the Ligogel.

**Ligogel (65-S8005)**: Slide for DNA and protein separations, UV-transparent, gel size 2.8 (w) x 8.5 (l) cm, comb, PMMA for 4 wells, 1.5 mm with stand for lifting the Ligogel, and rack for storing 5 Ligogels.

#### **SUGGESTION**

Order along with the Ligogel-s The enclosed rack to store 5 Ligogels after casting.(65-09001)

#### Ligogel and its spares and accessories

| Item Description   | Cat. No. | Unit    |
|--|----------|---------|
| Ligogel-S, ready-to-use system, comb & UV-transparent tray, tank for running gel with electrodes, electrical cords with lid  | 65-S8000 | System  |
| Ligogel, ready-to-use system, comb & UV-transparent tray, 1 no.  | 65-08001 | 1 unit  |
| Ligogel-S, ready-to-use system, comb & UV-transparent tray, 5 nos.   | 65-08005 | 5 units |
| Ligogel tray with grooves and fluorescent ruler  | 65-08539 | 5 units |
| Ligogel comb, 4 well   | 65-05042 | 5 units |
| Ligogel, ready-to-use system, 5 nos. with enclosed rack to hold 5 casted ligogel trays. System comes with 5 combs & 5 UV-transparent trays (with grooves, fluorescent ruler and gel-anti slip slot) and 1 rack | 65-S8005 | System  |