

**RESEARCHER RANGE
VERTICAL GEL APPARATUS
SALIENT FEATURES**



Leak-proof

- No leakage of upper tank buffer as silicone gasket is tough & resilient
- No buffer leaks from plastic joints as sticking is done with special glues
- Leak-proof sealing using agarose in lower tank trough & slotted spacers

Error Minimization

- No slippage of gel sandwich due to in-situ gel casting
- No migration of samples in wrong direction due to unidirectional feature
- Straight wells as combs sit completely levelled on spacers

Rugged

- Breakage resistant Teflon combs, spacers & fibre-glass notched plate
- 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

Economical

- Run up to two gels per side
- Short and defined run times as gels can be run at constant current
- Can be run in the refrigerator due to its small size
- Saves reagent & operator cost as leakage and errors are prevented

RESEARCHER RANGE VERTICAL GEL APPARATUS SELECTION GUIDE

Model	Single /dual sided	No. of gels at a time	Gel size			No. of wells/ comb	Vol/ well (μL)	Buffer require- ment (mL)	Run time □	Recommended Power supply*	
			width (cm)	length (cm)	thickness (mm)						
MICROKIN	Single	1, 2	8.5	7.5	1, 1.5	10	50, 75	150	45 m	Electragel 100	
						13	30, 50				
MONOKIN	Single	1, 2	8.5	12	1, 1.5	10	75, 112	350	1 h 10 m		
						13	50, 66				
MIDIKIN	Single	1, 2	16.5	16	1, 1.5	20	75, 112	550	2 h 20 m	Electrapage 200	
						26	50, 66				
MACROKIN-S	Single	1, 2	18.5	18	1, 1.5	23	75, 112	750	1 h 50 m		
						30	50, 66				
MACROKIN	Single	1, 2	18.5	24	1, 1.5	23	75, 112	900	2 h 30 m		
						30	50, 66				
MINIKIN	Dual	1, 2, 3, 4	10	12	1, 1.5, 3	12	45, 66	1000	1 h 10 m	Electragel 100	
						16	75, 112				
			Length and breadth can be varied			user defined^					

□ Run time is an approximate time taken for migration of Bromophenol blue on a 10% SDS PAGE run at constant current of 1.67 mA/cm width of gel/ mm thickness of gel

* Power supply is not included in the ready-to-use system

The thickness of the gel and the corresponding volume/ well is kept of the same font colour for easy perusal

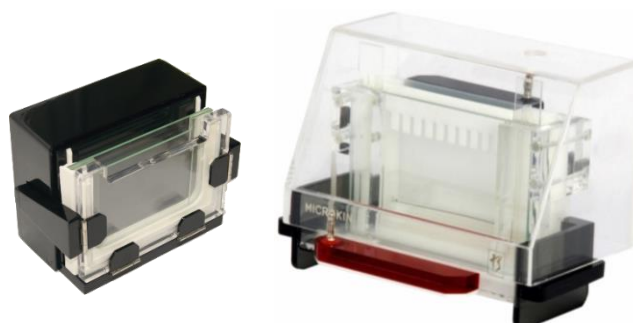
h – hours, m – minutes

[^] Preparative comb – Well size can be defined by the user at the time of ordering

MICROKIN

Gel size: 8.5 (w) x 7.5 (l) cm

- ✓ **Single sided, runs one or two gels**
- ✓ **In-situ gel casting/ Casting stand**
- ✓ **Designed for effective gel cooling**
- ✓ **No sample loss due to uni-directional migration**
- ✓ **Gel thickness: 1/ 1.5 mm**
- ✓ **Wells per gel: 10/ 13**
- ✓ **Buffer requirement: 150 mL**
- ✓ **10% SDS-PAGE run in 45 min**



Microkin with casting stand (left)

Features of this apparatus

Leak Proof

- Gaskets made of silicone are tough & resilient
- Leaks from plastic joints are prevented as sticking is done with specially manufactured glues
- Leak proof patent pending gel casting stand

Rugged

- Breakage proof Teflon combs, & fibre-glass notched plate
- Electrodes do not break as they are thick & purity > than 99.9%
- No corrosion due to resin filled male connectors

High Resolution

- Sharper bands because of thin glass plates & deep tank
- Good cooling as entire gel-sandwich is in contact with the buffer
- Low positioned electrodes stir buffer to cool gel

Error Minimization

- Migration of samples in wrong direction prevented due to unidirectional feature
- Wells formed straight as combs sit levelled with the spacers
- Run up to two gels at a time in the same system

Ready-to-use system includes

	02-00142	02-00143	02-00144	02-00145
	<i>In situ casting/</i> Uni-directional migration	<i>In situ casting/</i> Bi-directional migration	<i>Casting stand/</i> Uni-directional migration	<i>Casting stand/</i> Bi-directional migration
1. Lower anodic tank fitted with male connector and electrode	Y	Y	Y	Y
2. Cathodic electrode unit fitted with male connector and electrode	Y	Y	Y	Y
3. Resilient silicone gasket for cathodic electrode unit	Y	Y	Y	Y
4. One notched and one rectangular glass plate (square bottom)	Y	Y	-	-
5. One notched and one rectangular glass plate (rounded bottom)	-	-	Y	Y
6. Two 1.5 mm thick, breakage resistant, slotted spacers	Y	Y	-	-
7. Two 1.5 mm thick, breakage resistant, rounded spacers	-	-	Y	Y
8. One PTFE comb (1.5 mm thick, 10 wells, est. vol. 75 µL/well)	Y	Y	Y	Y
9. Set of clamps with screws	Y	Y	Y	Y
10. Gel-casting stand for variable gel thickness and number	-	-	Y	Y
11. C shaped rubber gasket for single gel of 1.5 mm	-	-	Y	Y
11. Agarose dispenser for filling slot in spacers	Y	Y	-	-
12. Gel-sandwich opener	Y	Y	Y	Y
13. Lid for safety	Y	Y	Y	Y
14. Electrical cords with male & female connectors	Y	Y	Y	Y
15. Instruction manual	Y	Y	Y	Y

Ordering description

Microkin (02-00142): Vertical electrophoresis single sided system of gel size 8.5 (w) x 7.5 (l) cm, with male connectors, in situ gel casting, slotted spacers, uni-directional migration and capable of accepting two gels.

Microkin-BD (02-00143): Vertical electrophoresis single sided system of gel size 8.5 (w) x 7.5 (l) cm, with male connectors, in situ gel casting, slotted spacers, bi-directional migration and capable of accepting two gels.

Microkin with Casting stand (02-00144): Vertical electrophoresis single sided system of gel size 8.5 (w) x 7.5 (l) cm with male connectors, casting stand with 'C' shaped gasket for agarose free gel casting, rounded spacers, uni-directional migration and capable of accepting two gels.

SUGGESTION

Order along with Ready-to-use system

A set of notched fibreglass plate, rectangular glass plate and gel detacher (02-29071), Gel-casting stand (02-33050), Glass plate stand (02-35085), Comb with 13 wells (02-14131/2)

Microkin-BD with Casting stand (02-00145): Vertical electrophoresis single sided system of gel size 8.5 (w) x 7.5 (l) cm, with male connectors, casting stand with 'C' shaped gasket for agarose free gel casting, rounded spacers, bi-directional migration and capable of accepting two gels.

Microkin and its spares and accessories

Item Description	Cat. No.	Unit
Microkin, ready-to-use system for uni-directional migration	02-00142	System
Microkin, ready-to-use system for uni-directional migration with casting stand	02-00144	System
Microkin-BD, ready-to-use system for bi-directional migration	02-00143	System
Microkin-BD, ready-to-use system for bi-directional migration with casting stand	02-00145	System
Clamps 8.5 (l) cm with screws (one pair)	02-05085	Set
Screws for clamps and cathodic electrode unit (two of each)	02-06148	Packet
Resilient silicone gasket for cathodic electrode unit	02-08264	Piece
Comb 1 mm thick, PTFE, 10 wells, 10 mm deep, est. vol. 50 µL/well	02-14101	Piece
Comb 1.5 mm thick, PTFE, 10 wells, 10 mm deep, est. vol. 75 µL/well	02-14102	Piece
Comb 1 mm thick, PTFE, 13 wells, 10 mm deep, est. vol. 30 µL/well	02-14131	Piece
Comb 1.5 mm thick, PTFE, 13 wells, 10 mm deep, est. vol. 45 µL/well	02-14132	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	02-17081	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	02-17082	Set
Spacers, plain, one edge rounded, 1 mm thick, 8.5 cm length, breakage resistant (one pair)	02-17083	Set
Spacers, plain, one edge rounded, 1.5 mm thick, 8.5 cm length, breakage resistant (one pair)	02-17084	Set
Notched and rectangular glass plate, 12.5 (w) x 8.5 (l) cm (one of each), square bottom edges	02-28072	Set
Notched and rectangular glass plate, 12.5 (w) x 8.5 (l) cm (one of each), rounded bottom edges	02-28073	Set
Rectangular glass plates, 12.5 (w) x 8.5 (l) cm (two), square bottom	02-28082	Set
Rectangular glass plates, 12.5 (w) x 8.5 (l) cm (two), rounded bottom	02-28083	Set
Notched fibreglass plate (breakage resistant), rectangular glass plate, square bottom edge, and gel detacher (one of each)	02-29071	Set
Notched fibreglass plate (breakage resistant), rectangular glass plate, rounded bottom edge, and gel detacher (one of each)	02-29072	Set
Gel-detacher for fibreglass plate	02-30105	Piece
Gel-casting stand with binder clips	02-33075	Piece
Gel-casting stand, for variable gel thickness and number, for agarose free sealing	02-33050	System
Gel-casting stand, for single gel, for agarose free sealing	02-33010	System
Gel-casting stand, for dual gel, for agarose free sealing	02-33020	System
C shaped rubber gasket (for single gel of 1 mm) for use with casting stand	02-33152	Piece
C shaped rubber gasket (for dual gel of 1 mm) for use with casting stand	02-33153	Piece
C shaped rubber gasket (for single gel of 1.5 mm) for use with casting stand	02-33154	Piece
C shaped rubber gasket (for dual gel of 1.5 mm) for use with casting stand	02-33155	Piece
Glass plate stand	02-35085	Piece
Gel-sandwich opener	61-30257	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	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
Microkin, CEU. Replacement part for single sided system of gel size 8.5 (w) x 7.5 (l) cm	02-01142	Piece
Microkin-BD, CEU. Replacement part for single sided system of gel size 8.5 (w) x 7.5 (l) cm	02-01143	Piece
Microkin, tank. Replacement part for single sided system of gel size 8.5 (w) x 7.5 (l) cm	02-02142	Piece
Microkin-BD, tank. Replacement part for single sided system of gel size 8.5 (w) x 7.5 (l) cm	02-02143	Piece

MONOKIN

Gel size: 8.5 (w) x 12 (l) cm

- ✓ **Single sided, runs one or two gels**
- ✓ **In-situ gel casting/ Casting stand**
- ✓ **Designed for effective gel cooling**
- ✓ **No sample loss due to uni-directional migration**

- ✓ **Gel thickness: 1/ 1.5 mm**
- ✓ **Wells per gel: 10/ 13**
- ✓ **Buffer requirement: 350 mL**
- ✓ **10% SDS-PAGE run in 1 hr 10 min**



Monokin with casting stand (left)

Features of this apparatus

Leak Proof

- Gaskets made of silicone are tough & resilient
- Leaks from plastic joints are prevented as sticking is done with specially manufactured glues
- Leak proof patent pending gel casting stand

Rugged

- Breakage proof Teflon combs, & fibre-glass notched plate
- Electrodes do not break as they are thick & purity > than 99.9%
- No corrosion due to resin filled male connectors

High Resolution

- Sharper bands because of thin glass plates & deep tank
- Good cooling as entire gel-sandwich is in contact with the buffer
- Low positioned electrodes stir buffer to cool gel

Error Minimization

- Migration of samples in wrong direction prevented due to unidirectional feature
- Wells formed straight as combs sit levelled with the spacers
- Run up to two gels at a time in the same system

Ready-to-use system includes

1. Lower anodic tank fitted with male connector and electrode
2. Cathodic electrode unit fitted with male connector and electrode
3. Resilient silicone gasket for cathodic electrode unit
4. One notched and one rectangular glass plate (square bottom)
5. One notched and one rectangular glass plate (rounded bottom)
6. Two 1.5 mm thick, breakage resistant, slotted spacers
7. Two 1.5 mm thick, breakage resistant, rounded spacers
8. One PTFE comb (1.5 mm thick, 10 wells, est. vol. 75 µL/well)
9. Set of clamps with screws
10. Gel-casting stand for variable gel thickness and number
11. C shaped rubber gasket for single gel of 1.5 mm
11. Agarose dispenser for filling slot in spacers
12. Gel-sandwich opener
13. Lid for safety
14. Electrical cords with male & female connectors
15. Instruction manual

	03-00182	03-00183	03-00184	03-00185
	<i>In situ casting/ Uni-directional migration</i>	<i>In situ casting/ Bi-directional migration</i>	<i>Casting stand/ Uni-directional migration</i>	<i>Casting stand/ Bi-directional migration</i>
	Y	Y	Y	Y
	Y	Y	Y	Y
	Y	Y	Y	Y
	Y	Y	-	-
	-	-	Y	Y
	Y	Y	-	-
	-	-	Y	Y
	Y	Y	Y	Y
	Y	Y	Y	Y
	-	-	Y	Y
	Y	Y	-	-
	Y	Y	Y	Y
	Y	Y	Y	Y
	Y	Y	Y	Y
	Y	Y	Y	Y

Ordering description

Monokin (03-00182): Vertical electrophoresis single sided system of gel size 8.5 (w) x 12 (l) cm, with male connectors, in situ gel casting, slotted spacers, uni-directional migration and capable of accepting two gels.

Monokin-BD (03-00184): Vertical electrophoresis single sided system of gel size 8.5 (w) x 12 (l) cm, with male connectors, in situ gel casting, slotted spacers, bi-directional migration and capable of accepting two gels.

Monokin with Casting stand (03-00183): Vertical electrophoresis single sided system of gel size 8.5 (w) x 12 (l) cm with male connectors, casting stand with 'C' shaped gasket for agarose free gel casting, rounded spacers, uni-directional migration and capable of accepting two gels.

SUGGESTION

Order along with ready-to-use system

A set of notched fibreglass plate, rectangular glass plate and gel detacher (03-29121), Gel-casting stand (03-33115), Glass plate stand (03-35085), Comb with 13 wells (03-14131/2)

Monokin-BD with Casting stand (03-00185): Vertical electrophoresis single sided system of gel size 8.5 (w) x 12 (l) cm, with male connectors, casting stand with 'C' shaped gasket for agarose free gel casting, rounded spacers, bi-directional migration and capable of accepting two gels.

Monokin and its spares and accessories

Item Description	Cat. No.	Unit
Monokin, ready-to-use system for uni-directional migration	03-00182	System
Monokin, ready-to-use system for uni-directional migration with casting stand	03-00184	System
Monokin-BD, ready-to-use system for bi-directional migration	03-00183	System
Monokin-BD, ready-to-use system for bi-directional migration with casting stand	03-00185	System
Clamps 13 (l) cm with screws (one pair)	03-05130	Set
Screws for clamps and cathodic electrode unit (two of each)	03-06148	Packet
Resilient silicone gasket with insert for cathodic electrode unit	03-09364	Piece
Comb 1 mm thick, PTFE, 10 wells, 15 mm deep, est. vol. 75 µL/well	03-14101	Piece
Comb 1.5 mm thick, PTFE, 10 wells, 15 mm deep, est. vol. 112 µL/well	03-14102	Piece
Comb 1 mm thick, PTFE, 13 wells, 15 mm deep, est. vol. 45 µL/well	03-14131	Piece
Comb 1.5 mm thick, PTFE, 13 wells, 15 mm deep, est. vol. 66 µL/well	03-14132	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	03-17131	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	03-17132	Set
Spacers, plain, 1 mm thick, breakage resistant (one pair)	03-17083	Set
Spacers, plain, 1.5 mm thick, breakage resistant (one pair)	03-17084	Set
Notched and rectangular glass plates, square bottom edges, 12.5 (w) x 13 (l) cm (one of each)	03-28122	Set
Notched and rectangular glass plates, rounded bottom edges, 12.5 (w) x 13 (l) cm (one of each)	03-28123	Set
Rectangular glass plates, square bottom, 12.5 (w) x 13 (l) cm (two)	03-28132	Set
Rectangular glass plates, rounded bottom, 12.5 (w) x 13 (l) cm (two)	03-28133	Set
Notched fibreglass plate (breakage resistant), rectangular glass plate and gel detacher (one of each)	03-29121	Set
Notched fibreglass plate (breakage resistant), with rounded bottom, rectangular glass plate and gel detacher (one of each)	03-29122	Set
Gel-detacher for fibreglass plate	03-30105	Piece
Gel-casting stand with binder clips	03-33125	Piece
Gel-casting stand, for variable gel thickness and number, for agarose free sealing	03-33050	System
Gel-casting stand, for single gel, for agarose free sealing	03-33010	System
Gel-casting stand, for dual gel, for agarose free sealing	03-33020	System
C shaped rubber gasket (for single gel of 1 mm) for use with casting stand	03-33109	Piece
C shaped rubber gasket (for dual gel of 1 mm) for use with casting stand	03-33110	Piece
C shaped rubber gasket (for single gel of 1.5 mm) for use with casting stand	03-33111	Piece
C shaped rubber gasket (for dual gel of 1.5 mm) for use with casting stand	03-33112	Piece
Glass plate stand	03-35085	Piece
Gel-sandwich opener	61-30182	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with male & female connectors designed for user safety	66-40124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 14 mL. Accommodates magnetic spin-bar of ≤ 10 mm length	67-50167	Piece
Penta-legged levelling table (21 x 21 cm) with spirit-level	69-41219	Set
Monokin, CEU. Replacement part for single sided system of gel size 8.5 (w) x 12 (l) cm, with male connector	03-01182	Piece
Monokin-BD, CEU. Replacement part for single sided system of gel size 8.5 (w) x 12 (l) cm, with male connector	03-01183	Piece
Monokin, tank. Replacement part for single sided system of gel size 8.5 (w) x 12 (l) cm, with male connector	03-02182	Piece
Monokin-BD, tank. Replacement part for single sided system of gel size 8.5 (w) x 12 (l) cm, with male connector	03-02183	Piece

MIDIKIN

Standard gel size: 16.5 (w) x 16 (l) cm

- ✓ Single sided, runs one or two gels
- ✓ *In-situ* gel casting
- ✓ Designed for effective gel cooling
- ✓ No sample loss due to uni-directional migration
- ✓ Gel thickness: 1/ 1.5 mm
- ✓ Wells per gel: [20/ 26] X 2 combs
- ✓ Buffer requirement: 650 mL
- ✓ 10% SDS-PAGE run in 2 hr



Midikin

Features of this apparatus

Leak Proof

- Gaskets made of silicone are tough & resilient
- Buffer leaks from plastic joints prevented as sticking is done with specially manufactured glues

Rugged

- Breakage proof Teflon combs, & fibre-glass notched plate
- Electrodes do not break as they are thick & purity > than 99.9%
- No corrosion due to resin filled male connectors

High Resolution

- Sharper bands because of thin glass plates & deep tank
- Good cooling as entire gel-sandwich is in contact with the buffer
- Low positioned electrodes stir buffer to cool gel

Error Minimization

- Migration of samples in wrong direction prevented due to unidirectional feature
- Wells formed straight as combs sit levelled with the spacers
- Run up to two gels at a time in the same system

Ready-to-use system includes

1. Lower anodic tank fitted with male connector and electrode
2. Cathodic electrode unit fitted with male connectors and electrode
3. Resilient silicone gasket with inserts for cathodic electrode unit
4. One notched and one rectangular glass plate (square bottom)
5. Two 1.5 mm thick, breakage resistant, slotted spacers
6. Two PTFE comb (1.5 mm thick, 20 wells, est. vol. 112 µL/well)
7. Set of clamps with screws
8. Agarose dispenser for filling slot in spacers
9. Gel-sandwich opener
10. Lid for safety
11. Electrical cords with male & female connectors
12. Instruction manual

05-00162 <i>In situ</i> casting/ Uni-directional migration	05-00163 <i>In situ</i> casting/ Bi-directional migration
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y

Ordering description

Midikin (05-00162): Vertical electrophoresis single sided system of gel size 16.5 (w) x 16 (l) cm, with male connectors, *in situ* gel casting, slotted spacers, uni-directional migration and capable of accepting two gels

Midikin-BD (05-00163): Vertical electrophoresis single sided system of gel size 16.5 (w) x 16 (l) cm, with male connectors, *in situ* gel casting, slotted spacers, bi-directional migration and capable of accepting two gels

SUGGESTION

Order along with Ready-to-use system

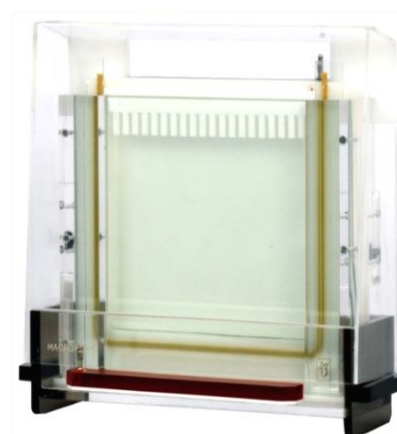
Gel-casting stand (05-33175),
Glass plate stand (05-35165),
Combs with 26 wells (05-16261/2)

Midikin and its spares and accessories

Item Description	Cat. No.	Unit
Midikin, ready-to-use system for uni-directional migration	05-00162	System
Midikin-BD, ready-to-use system for bi-directional migration	05-00163	System
Clamps 17 (l) cm with screws (one pair)	05-05170	Set
Screws for clamps and cathodic electrode unit (two of each)	05-06148	Packet
Resilient silicone gasket with insert for cathodic electrode unit	05-09364	Piece
Comb 1 mm thick, PTFE, 20 wells, 15 mm deep, est. vol. 75 µL/well	05-16201	Piece
Comb 1.5 mm thick, PTFE, 20 wells, 15 mm deep, est. vol. 112 µL/well	05-16202	Piece
Comb 1 mm thick, PTFE, 26 wells, 15 mm deep, est. vol. 45 µL/well	05-16261	Piece
Comb 1.5 mm thick, PTFE, 26 wells, 15 mm deep, est. vol. 66 µL/well	05-16262	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	05-17171	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	05-17172	Set
Notched (3 mm) and rectangular glass plates, 20.5 (w) x 17 (l) cm (one of each)	05-28162	Set
Rectangular glass plates, 20.5 (w) x 17 (l) cm (two)	05-28172	Set
Gel-casting stand with binder clips	05-33175	Piece
Glass plate stand	05-35165	Piece
Gel-sandwich opener	61-30182	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with male & female connectors design for user safety	66-40124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 22 mL. Accommodates magnetic spin-bar of ≤ 14 mm length	67-50207	Piece
Penta-legged levelling table (23 x 31 cm) with spirit-level	69-41319	Set
Midikin, CEU. Replacement part for single sided system of gel size 16.5 (w) x 16 (l) cm, with male connector	05-01162	Piece
Midikin-BD, CEU. Replacement part for single sided system of gel size 16.5 (w) x 16 (l) cm, with male connector	05-01163	Piece
Midikin, tank. Replacement part for single sided system of gel size 16.5 (w) x 16 (l) cm, with male connector	05-02162	Piece
Midikin-BD, tank. Replacement part for single sided system of gel size 16.5 (w) x 16 (l) cm, with male connector	05-02163	Piece

MACROKIN-S

Gel size: 18.5 (w) x 24 (l) cm



Macrokin-S

- ✓ **Single sided, runs one or two gels**
- ✓ **In-situ gel casting (using agarose)**
- ✓ **Designed for effective gel cooling**
- ✓ **No sample loss due to uni-directional migration**
- ✓ **Gels per run: 1 or 2**
- ✓ **Wells per gel: [23/ 30] x 2 combs**
- ✓ **Buffer requirement: 750 mL**
- ✓ **10% SDS-PAGE run in 1 hr 50 min**

Features of this apparatus

Leak Proof

- Gaskets made of silicone are tough & resilient
- Leaks from plastic joints are prevented as sticking is done with specially manufactured glues

Rugged

- Breakage proof Teflon combs, & fibre-glass notched plate
- Electrodes do not break as they are thick & purity > than 99.9%
- No corrosion due to resin filled male connectors

High Resolution

- Sharper bands because of thin glass plates & deep tank
- Good cooling as entire gel-sandwich is in contact with the buffer
- Low positioned electrodes stir buffer to cool gel

Error Minimization

- Migration of samples in wrong direction prevented due to unidirectional feature
- Wells formed straight as combs sit levelled with the spacers
- Run up to two gels at a time in the same system

Ready-to-use system includes

1. Lower anodic tank fitted with male connector and electrode
2. Cathodic electrode unit fitted with male connector and electrode
3. Resilient silicone gasket for cathodic electrode unit
4. One notched and one rectangular glass plate (square bottom)
5. Two 1.5 mm thick, breakage resistant, slotted spacers
6. One PTFE comb (1.5 mm thick, 23 wells, est. vol. 112 µL/well)
7. Set of clamps with screws
8. Agarose dispenser for filling slot in spacers
9. Gel-sandwich opener
10. Lid for safety
11. Electrical cords with male & female connectors
12. Instruction manual

04-00192 <i>In situ</i> casting/ Uni-directional migration	04-00193 <i>In situ</i> casting/ Bi-directional migration
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y

Ordering description

Macrokin-S (04-00192): Vertical electrophoresis single sided system of gel size 18.5 (w) x 18 (l) cm, with male connectors, in situ gel casting, slotted spacers, uni-directional migration and capable of accepting two gels.

Macrokin-S-BD (04-00193): Vertical electrophoresis single sided system of gel size 18.5 (w) x 18 (l) cm, with male connectors, in situ gel casting, slotted spacers, bi-directional migration and capable of accepting two gels.

SUGGESTION

Order along with Ready-to-use system

Gel-casting stand (04-33185),
Glass plate stand (04-35176),
Comb with 30 wells (04-1430112)

Macrokin-S and its spares and accessories

Item Description	Cat. No.	Unit
Macrokin-S, ready-to-use system for uni-directional migration	04-00192	System
Macrokin-S-BD, ready-to-use system for bi-directional migration	04-00193	System
Clamps 19 (l) cm with screws (one pair)	04-05190	Set
Screws for clamps and cathodic electrode unit (two of each)	04-06148	Packet
Resilient silicone gasket with insert for cathodic electrode unit	04-09544	Piece
Comb 1 mm thick, PTFE, 23 wells, 15 mm deep, est. vol. 75 µL/well	04-14231	Piece
Comb 1.5 mm thick, PTFE, 23 wells, 15 mm deep, est. vol. 112 µL/well	04-14232	Piece
Comb 1 mm thick, PTFE, 30 wells, 15 mm deep, est. vol. 45 µL/well	04-14301	Piece
Comb 1.5 mm thick, PTFE, 30 wells, 15 mm deep, est. vol. 66 µL/well	04-14302	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	04-17191	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	04-17192	Set
Notched (3 mm) and rectangular glass plates, 23.5 (w) x 19 (l) cm (one of each)	04-28182	Set
Rectangular glass plates, 23.5 (w) x 19 (l) cm (two)	04-28192	Set
Gel-casting stand with binder clips	04-33185	Piece
Glass plate stand	04-35176	Piece
Gel-sandwich opener	61-30257	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with male & female connectors design for user safety	66-40124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 22 mL. Accommodates magnetic spin-bar of ≤ 14 mm length	67-50207	Piece
Penta-legged levelling table (28 x 45 cm) with spirit-level	69-41459	Set
Macrokin-S, CEU. Replacement part for single sided system of gel size 18.5 (w) x 18 (l) cm, with male connector	04-01192	Piece
Macrokin-S-BD, CEU. Replacement part for single sided system of gel size 18.5 (w) x 18 (l) cm, with male connector	04-01193	Piece
Macrokin-S, tank. Replacement part for single sided system of gel size 18.5 (w) x 18 (l) cm, with male connector	04-02192	Piece
Macrokin-S-BD, tank. Replacement part for single sided system of gel size 18.5 (w) x 18 (l) cm, with male connector	04-02193	Piece

MACROKIN

Gel size: 18.5 (w) x 24 (l) cm

- ✓ Single sided, runs one or two gels
- ✓ *In-situ* gel casting
- ✓ Designed for effective gel cooling
- ✓ No sample loss as uni-directional migration
- ✓ Gels per run: 1 or 2
- ✓ Wells per gel: [23/ 30] x 2 combs
- ✓ Buffer requirement: 950 mL
- ✓ 10% SDS-PAGE run in 2 hr 30 min



Macrokin

Features of this apparatus

Leak Proof

- Gaskets made of silicone are tough & resilient
- Leaks from plastic joints are prevented as sticking is done with specially manufactured glues

Rugged

- Breakage proof Teflon combs
- Electrodes do not break as they are thick & purity > than 99.9%
- No corrosion due to resin filled male connectors

High Resolution

- Sharper bands because of thin glass plates & deep tank
- Good cooling as entire gel-sandwich is in contact with the buffer
- Low positioned electrodes stir buffer to cool gel

Error Minimization

- Migration of samples in wrong direction prevented due to unidirectional feature
- Wells formed straight as combs sit levelled with the spacers
- Run up to two gels at a time in the same system

Ready-to-use system includes

1. Lower anodic tank fitted with male connector and electrode
2. Cathodic electrode unit fitted with male connector and electrode
3. Resilient silicone gasket for cathodic electrode unit
4. One notched and one rectangular glass plate (square bottom)
5. Two 1.5 mm thick, breakage resistant, slotted spacers
6. One PTFE comb (1.5 mm thick, 23 wells, est. vol. 112 µL/well)
7. Set of clamps with screws
8. Agarose dispenser for filling slot in spacers
9. Gel-sandwich opener
10. Lid for safety
11. Electrical cords with male & female connectors
12. Instruction manual

04-00312	04-00313
<i>In situ</i> casting/ Uni-directional migration	<i>In situ</i> casting/ Bi-directional migration
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y
Y	Y

Ordering description

Macrokin (04-00312): Vertical electrophoresis single sided system of gel size 18.5 (w) x 24 (l) cm, with male connectors, *in situ* gel casting, slotted spacers, uni-directional migration and capable of accepting two gels.

Macrokin-BD (04-00313): Vertical electrophoresis single sided system of gel size 18.5 (w) x 24 (l) cm, with male connectors, *in situ* gel casting, slotted spacers, bi-directional migration and capable of accepting two gels.

SUGGESTION

Order along with Ready-to-use system

Gel-casting stand (04-33245),
Glass plate stand (04-35178)

Macrokin and its spares and accessories

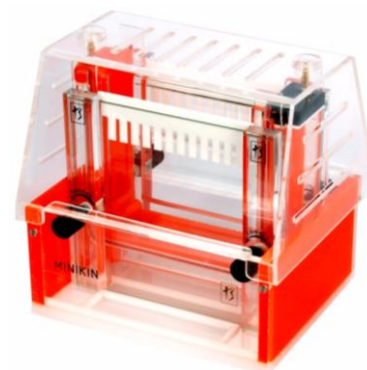
Item Description	Cat. No.	Unit
Macrokin, ready-to-use system for uni-directional migration	04-00312	System
Macrokin-BD, ready-to-use system for bi-directional migration	04-00313	System
Clamps 25 (l) cm with screws (one pair)	04-05250	Set
Screws for clamps and cathodic electrode unit (two of each)	04-06148	Packet
Resilient silicone gasket with insert for cathodic electrode unit	04-09664	Piece
Comb 1 mm thick, PTFE, 23 wells, 15 mm deep, est. vol. 75 µL/well	04-14231	Piece
Comb 1.5 mm thick, PTFE, 23 wells, 15 mm deep, est. vol. 112 µL/well	04-14232	Piece
Comb 1 mm thick, PTFE, 30 wells, 15 mm deep, est. vol. 45 µL/well	04-14301	Piece
Comb 1.5 mm thick, PTFE, 30 wells, 15 mm deep, est. vol. 66 µL/well	04-14302	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	04-17251	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	04-17252	Set
Notched (3 mm) and rectangular glass plates, 23.5 (w) x 25 (l) cm (one of each)	04-28242	Set
Rectangular glass plates, 23.5 (w) x 25 (l) cm (two)	04-28252	Set
Gel-casting stand with binder clips	04-33245	Piece
Glass plate stand	04-35178	Piece
Gel-sandwich opener	61-30257	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with male & female connectors design for user safety	66-40124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 22 mL. Accommodates magnetic spin-bar of ≤ 14 mm length	67-50207	Piece
Penta-legged levelling table (28 x 45 cm) with spirit-level	69-41319	Set
Macrokin, CEU. Replacement part for single sided system of gel size 18.5 (w) x 24 (l) cm, with male connector	04-01312	Piece
Macrokin-BD, CEU. Replacement part for single sided system of gel size 18.5 (w) x 24 (l) cm, with male connector	04-01313	Piece
Macrokin, tank. Replacement part for single sided system of gel size 18.5 (w) x 24 (l) cm, with male connector	04-02312	Piece
Macrokin-BD, tank. Replacement part for single sided system of gel size 18.5 (w) x 24 (l) cm, with male connector	04-02313	Piece

MINIKIN

Standard gel size: 10 (w) x 12 (l) cm

Allows variation of gel size in length, width and thickness

- ✓ **Dual sided**
- ✓ **Runs one/ two/ three/ four gels at a time**
- ✓ **In-situ gel casting/ Casting stand**
- ✓ **Designed for effective gel cooling**
- ✓ **No sample loss due to uni-directional migration**
- ✓ **Gel thickness: 1/ 1.5 mm**
- ✓ **Wells per gel: 12/ 16**
- ✓ **Buffer requirement: 1000 mL**
- ✓ **10% SDS-PAGE run in 1 hr 10 min**



Minikin

Features of this apparatus

Leak Proof

- Gaskets made of silicone are tough & resilient
- Leaks from plastic joints are prevented as sticking is done with specially manufactured glues
- Leak proof patent pending gel casting stand

Rugged

- Breakage proof Teflon combs, & fibre-glass notched plate
- Electrodes do not break as they are thick & purity > than 99.9%
- No corrosion due to resin filled male connectors

High Resolution

- Sharper bands because of thin glass plates & deep tank
- Good cooling as entire gel-sandwich is in contact with the buffer
- Low positioned electrodes stir buffer to cool gel

Error Minimization

- Migration of samples in wrong direction prevented due to unidirectional feature
- Wells formed straight as combs sit levelled with the spacers
- Run up to two gels at a time in the same system

Ready-to-use system includes

1. Lower anodic tank
2. Central electrode unit fitted with electrodes and gold plated male connectors
3. Two resilient silicone gaskets with inserts for central electrode unit
4. Two notched and two rectangular glass plate (square bottom)
5. Two notched and two rectangular glass plate (rounded bottom)
6. Four 1.5 mm thick, breakage resistant, slotted spacers
7. Four 1.5 mm thick, breakage resistant, rounded spacers
8. Two PTFE comb (1.5 mm thick, 12 wells, est. vol. 112 µL/well)
9. Four clamps with screws and a clamp opener
10. Gel-casting stand for variable gel thickness and number
11. C shaped rubber gasket for single gel of 1.5 mm
12. Agarose dispenser for filling slot in spacers
13. Gel-sandwich opener
14. Glass plate stand
15. Vented lid for safety
16. Electrical cords with male & female connectors
17. Two buffer savers
18. Instruction manual

01-00000

*In situ casting/
Uni-directional
migration*

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

01-00001

*Casting stand/
Uni-directional
migration*

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Ordering description

Minikin (01-00000): Vertical electrophoresis dual sided system of gel size 10 (w) x 12 (l) cm, with gold-plated male connectors, in situ gel casting, slotted spacers, uni-directional migration and capable of accepting four gels.

Minikin with casting stand (01-00001): Vertical electrophoresis dual sided system of gel size 10 (w) x 12 (l) cm, with gold-plated male connectors, casting stand with 'C' shaped gasket for agarose free gel casting, rounded spacers, uni-directional migration and capable of accepting four gels.

SUGGESTION

Order along with ready-to-use system

A set of notched fibreglass plates, rectangular glass plates and gel detacher (01-29121), Comb with 16 wells (01-14161/2), Acrylic dam (01-27144)

Minikin and its spares and accessories

Item Description	Cat. No.	Unit
Minikin, ready-to-use system for uni-directional migration	01-00000	System
Minikin, ready-to-use system for uni-directional migration with casting stand	01-00001	System
Clamps 13 (l) cm with screws (2 No.)	01-05130	Set
Clamps 13 (l) cm with screws for gel partitioning spacers (2 No.)	01-05131	Set
Screws for clamps (6 No.)	01-06209	Packet
Clamp opener	01-07152	Piece
Resilient silicone gaskets with inserts for central electrode unit (2 No.)	01-09354	Piece
Comb 1 mm thick, PTFE, 12 wells, 15 mm deep, est. vol. 75 µL/well	01-14121	Piece
Comb 1.5 mm thick, PTFE, 12 wells, 15 mm deep, est. vol. 112 µL/well	01-14122	Piece
Comb 1 mm thick, PTFE, 16 wells, 15 mm deep, est. vol. 45 µL/well	01-14161	Set
Comb 1.5 mm thick, PTFE, 16 wells, 15 mm deep, est. vol. 66 µL/well	01-14162	Piece
Spacers, slotted, 1 mm thick, breakage resistant (two pairs)	01-17131	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (two pairs)	01-17132	Set
Spacers, preparative, slotted, 3 mm thick, 13 (l) cm	01-17134	Piece
Spacers, gel partitioning, 1 mm thick, 12 (l) cm (2 No.)	01-18131	Set
Spacers, gel partitioning, 1.5 mm thick, 12 (l) cm (2 No.)	01-18132	Set
Spacers, plain with one edge rounded, 1 mm thick, (two pairs) length 13 cm	01-18133	Set
Spacers, plain with one edge rounded, 1.5 mm thick, (two pairs) length 13 cm	01-18134	Set
Notched and rectangular glass plates, 14 (w) x 13 (l) cm (two of each)	01-28122	Set
Notched and rectangular glass plates, 14 (w) x 13 (l) cm (two of each) rounded bottom edges for use with rounded spacers	01-28123	Set
Rectangular glass plates, 14 (w) x 13 (l) cm (four)	01-28132	Set
Rectangular glass plates, 14 (w) x 13 (l) cm (four) rounded bottom edges for use with rounded spacers	01-28133	Set
Acrylic dam (14 x 14 cm)	01-27144	Piece
Notched fibreglass plates [breakage resistant] (2 No.), rectangular glass plates (2 No.) and gel detacher (one)	01-29121	Set
Notched fibreglass plates [breakage resistant] (2 No.), rectangular glass plates (2 No.) rounded bottom edges for use with rounded spacers, and gel detacher (one)	01-29122	Set
Gel-detacher for fibreglass plate	01-30115	Piece
Gel-casting stand with binder clips	01-33125	Piece
Dual gel-casting stand, for variable gel thickness and number, for agarose free sealing, which fits 1-4 gels	01-33100	System
Dual gel-casting stand, for upto 2 gels, with agarose free sealing	01-33010	System
Dual gel-casting stand, for upto 4 gels, with agarose free sealing	01-33020	System
C shaped rubber gasket (for single gel of 1 mm) for use with Gel casting stand for agarose free sealing (2 nos.)	01-33009	Piece
C shaped rubber gasket (for single gel of 1.5 mm) for use with Gel casting stand for agarose free sealing (2 nos.)	01-33109	Piece

Item Description	Cat. No.	Unit
C shaped rubber gasket (for dual gel of 1 mm) for use with Gel casting stand for agarose free sealing (2 nos.)	01-33010	Piece
C shaped rubber gasket (for dual gel of 1.5 mm) for use with Gel casting stand for agarose free sealing (2 nos.)	01-33110	Piece
Glass plate stand	01-35104	Piece
Buffer savers (2 No.)	01-37981	Set
Gel-sandwich opener	61-30257	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with gold plated male & female connectors designed for user safety	66-41124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 14mL. Accommodates magnetic spin-bar of ≤ 10 mm length	67-50167	Piece
Penta-legged levelling table (21 x 21 cm) with spirit-level	69-41219	Set
Minikin, CEU. Replacement part for single sided system of gel size 10 (w) x 12 (l) cm, with male connector	01-01000	Piece
Minikin, tank. Replacement part for single sided system of gel size 10 (w) x 12 (l) cm, with male connector	01-02000	Piece
Minikin, lid. Replacement part for vertical electrophoresis dual sided system	01-02010	Piece