



## Vivacon® 500

DNA and protein concentration and rebuffing up to 500 µl



Vivacon® centrifugal concentrators offer the optimal solution for DNA and protein concentration and buffer exchange applications using their high recovery Hydrosart® membrane.

### Vivacon® Applications

- DNA rebuffing of organic extraction samples before sequencing reaction
- Dye removal after sequencing reaction
- Primer removal
- Plasmid concentration
- Protein concentration
- Protein rebuffing

For larger volumes up to 2 ml Vivacon 2 with identical features is available. See Datasheet SLL2001-e.

Feature	Benefit
Low binding material	High recoveries of low sample concentrations
Re-spin possibility	Complete and highly reproducible sample recovery

### Technical Specifications

#### Concentrator capacity

Fixed angle rotor	0.5 ml
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#### Dimensions

Total length (Concentration)	45 mm
Total length (Back-spin)	47.5 mm
Width	12.4 mm
Active membrane area	0.32 cm <sup>2</sup>
Hold-up volume membrane and support	< 5 µl
Dead stop volume	5 µl (40° rotor)

### Equipment required

#### Centrifuge

Rotor type	Fixed angle
Minimum rotor angle	40°
Rotor cavity	To fit 1.5   2.2 ml (11 mm) conical bottom tubes
Maximum speed	14,000 g*

#### Materials of construction

Body	Polycarbonate
Filtrate vessel	Polypropylene
Membrane	Hydrosart®

\* Please note, Vivacon® 500 devices with membrane MWCO > 100 kDa need to be processed at lower g forces. See manuals for details.

## Performance Characteristics

### Vivacon® 500 for DNA

Start volume 0.5 ml, sample concentration 50 ng/ml DNA

	Sample size (bp)	Time to concentrate up to 30x [min.] at 20°C	Concentrate recovery %	g-force (xg)
2,000 MWCO	10	60 min	93%	7,500
10,000 MWCO	30	25 min	94%	7,500
30,000 MWCO	50	18 min	88%	5,000
50,000 MWCO	300	18 min	91%	5,000
100,000 MWCO	600	10 min	87%	3,000

### Vivacon® 500 for proteins

Start volume 0.5 ml, sample and concentration of proteins as specified in table

	Sample	Time to concentrate up to 30x [min.] at 20°C	Concentrate recovery %	g-force (xg)
2,000 MWCO	0.25 mg/ml cytochrome c	30 min	95%	14,000
10,000 MWCO	0.25 mg/ml cytochrome c	15 min	92%	14,000
30,000 MWCO	1.0 mg/ml BSA	10 min	95%	14,000
50,000 MWCO	1.0 mg/ml BSA	10 min	92%	14,000
100,000 MWCO	1.0 mg/ml bovine IgG	11 min	90%	8,000

## Conversion Table for Hydrosart® MWCO to Nucleotide Cut-off

Membrane	MWCO	Double-Stranded Nucleotide Cut-off (bp)
Hydrosart®	2 kDa	> 10
Hydrosart®	10 kDa	> 30
Hydrosart®	30 kDa	> 50
Hydrosart®	50 kDa	> 300
Hydrosart®	100 kDa	> 600

## Ordering Information

Vivacon® 500	Pack size	Prod. No.
2,000 MWCO	25	VN01H91
2,000 MWCO	100	VN01H92
10,000 MWCO	25	VN01H01
10,000 MWCO	100	VN01H02
30,000 MWCO	25	VN01H21
30,000 MWCO	100	VN01H22
50,000 MWCO	25	VN01H31
50,000 MWCO	100	VN01H32
100,000 MWCO	25	VN01H41
100,000 MWCO	100	VN01H42

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