

## Vivaspin 15R

### 2 - 15 ml samples

Vivaspin 15R is the latest member of the Vivaspin product family with all the unique features of Vivascience concentrators including a patented vertical membrane and a dead stop. Vivaspin 15R is targeting the volume segment 2 to 15 ml with a modified regenerated cellulose membrane; Hydrosart®. This membrane is ideal where extremely high recovery with very low adsorption is needed, for example in applications such as desalting and concentration of Ig fractions.

- Ultimate recovery at low Adsorption (95-98%)
- Extremely short concentration time (30x in 15 min.)
- Convenient application protocol with easy handling
- Easy scale-up to Vivaflow 200 with Hydrosart® membrane for volumes up to 5 litres
- Very small hold up volume (< 20 µl)



### Rotor Compatibility

Please note:

Vivaspin 15R (30 mm x 116 mm) is designed to fit into rotors that can accommodate Falcon 50 ml conical bottom tubes, e.g. Beckman Allegra 25R with TS-5.1-500 swing-out rotor with BUC 5 buckets and 368327 adaptors; Beckman TA-10.250 25° fixed angle rotor with 356966 adaptors; Heraeus Multifuge 3 S-R with (Heraeus / Sorvall) 75006445 swing out rotor with 75006441 buckets and adaptors for Falcon 50 ml conical bottom tubes.

These devices are not designed to fit into rotors that only accept round bottom 29 mm x 105 mm tubes, e.g. Sorvall SS34 Beckmann JA 20. If your rotor accepts only 29 mm x 105 mm round bottom tubes, please use the Vivaspin 15, which can be used in either round bottom or conical centrifuge tubes.

Performance Characteristics				
Time to concentrate up to 30x [min. ] at 20°C and solute recovery %				
Rotor	Swing bucket		25° Fixed angle	
Centrifugal force	3,000 g		6,000 g	
Start volume	15 ml		12.5 ml	
	Min.	Rec.	Min.	Rec.
Insulin chain A 0.1 mg/ml* (2,500 MW)				
<b>2,000 MWCO</b>	70	96 %	60	96 %
Aprotinin 0.1 mg/ml* (6,500 MW)				
<b>5,000 MWCO</b>	47	95 %	45	95 %
Cytochrome c 0.25 mg/ml (12,400 MW)				
<b>5,000 MWCO</b>	45	96 %	45	96 %
<b>10,000 MWCO</b>	25	94 %	18	94 %
α-chymotrypsin 0.25 mg/ml* (25,000 MW)				
<b>5,000 MWCO</b>	50	98 %	45	98 %

<b>10,000 MWCO</b>	25	98 %	18	98 %
Ovalbumin 1.0 mg/ml* (45,000 MW)				
<b>10,000 MWCO</b>	20	98 %	14	98 %
<b>30,000 MWCO</b>	15	94 %	12	94 %
BSA 1.0 mg/ml* (66,000 MW)				
<b>30,000 MWCO</b>	18	98 %	15	98 %
IgG 0.1 mg/ml* in DMEM (160,000 MW)				
<b>30,000 MWCO</b>	30	98 %	25	96 %
<b>* proteins other than IgG made up in 50 mM potassium sulphate, 150 mM sodium chloride, pH 7.4.</b>				

## Technical specifications

**Vivaspin 15R****Concentrator capacity**

Swing bucket rotor	15 ml
Fixed angle rotor	12.5 ml

**Dimensions**

Total Length	116 mm
Width	30 mm
Active membrane Area	3.9 cm <sup>2</sup>
Hold-up volume of membrane	<20 µl
Dead stop volume	30 µl

**Materials of construction**

Body	Polycarbonate
Filtrate vessel	Polypropylene
Concentrator cap	Polycarbonate
Membrane	Hydrosart

Ordering information		
Vivaspin 15R Hydrosart	Pack size	Prod. no.
2,000 MWCO	12	VS15RH91
2,000 MWCO	48	VS15RH92
5,000 MWCO	12	VS15RH11
5,000 MWCO	48	VS15RH12
10,000 MWCO	12	VS15RH01
10,000 MWCO	48	VS15RH02
30,000 MWCO	12	VS15RH21
30,000 MWCO	48	VS15RH22

Equipment required	
Centrifuge	
<b>Rotor type</b>	Swing bucket or Fixed angle
<b>Minimum rotor angle</b>	25°
<b>Rotor cavity</b>	To fit 50 ml (30 mm) conical bottom tubes
<b>Minimum effective speed</b>	1,500 g
<b>Recommended speed</b>	4,000 g
<b>Maximum speed</b>	6,000 g
Concentrate recovery	
<b>Pipette type</b>	Fixed or variable volume
<b>Recommended tip</b>	Thin gel loader type