

## BJP Clinical Concentrators

Concentration of Clinical Biological Samples



BJP concentrators offer fast and convenient means to prepare multiple clinical samples for analysis by electrophoresis or immunoassay. This is done without a centrifuge, pressure or vacuum source. Absorbent pads pull solvent and microsolutes through the ultrafilter concentrating the sample. A dead stop pocket at the bottom of each cell prevents filtration to dryness. The BJP-5 can hold up to 5 ml of sample while the BJP-10 can handle up to 10 ml. Both of these are available as individual units or as 8 test blocks. For samples up to 20 ml, the BJP-20 may be used with the optional expansion reservoir. The BJP-20 products are available as individual devices.

### BJP Applications

- Concentration of urine prior to electrophoresis for diagnosis of multiple myeloma and amyloidosis.
- Concentrate spinal fluid prior to electrophoresis for diagnosis of meningitis and multiple sclerosis.
- Concentrate bacterial antigens in urine (*Legionella*, *Pneumonia*, *Streptococcus B*) prior to immunoassay.

### Features

Integrated dead stop  
Uses plastic instead of glass Pasteur pipettes  
Black print for graduations  
Large volume models hold up to 20 ml  
Available as individual units or as 8 test blocks.

### Benefits

No risk of over concentration.  
No glass breakage during sample removal.  
Easy to read.  
Concentrate 100x in one cell and still have 100 µl for IFE tests.  
Individual units may be disposed after use. Blocks may have to be stored with sample residue.

### Technical Specifications

Concentrator Capacity	BJP-5	BJP-10	BJP-20
Normal volume	5 ml	10 ml	10 ml
With optional reservoir (BJPA-ER20)	NA	NA	20 ml

### Dimensions

For BJP-5/30 & 5/100, BJP-10/30 & 10/100, BP-20/30 & 20/100

	Width	Height	Depth
	38 mm	100 mm	24 mm
	38 mm	100 mm	24 mm
	45 mm	100 mm	27 mm

For BJP-5/40, BJP-10/40

	Width	Height	Depth
	147 mm	94 mm	70 mm
	147 mm	94 mm	70 mm
	NA	NA	NA

	Active membrane area	Dead stop volume
	25 cm <sup>2</sup>	50 µl
	25 cm <sup>2</sup>	50 µl
	28 cm <sup>2</sup>	50 µl

### Materials of Construction

Membrane	Polyethersulfone (PES) (7,500 MWCO)
Reservoir	Acrylonitrile Butadiene Styrene Polymer

### Equipment Required

#### Pipettes for Sample Delivery & Recovery

Plastic disposable pipettes are recommended and sold separately or with BJP packages (diameter 45 mm tapering to 1.0 mm, tip length 115 mm).

### Suggested Concentration Factors for Urine Samples

For a BJP Concentration Factor Calculator please visit: [www.vivaproducts.com/calculator.html](http://www.vivaproducts.com/calculator.html)

### Suggested CAP Validation Procedures

For Recommended Procedures please visit:

[www.vivaproducts.com/downloads/lab-procedure-performing-the-test.pdf](http://www.vivaproducts.com/downloads/lab-procedure-performing-the-test.pdf)

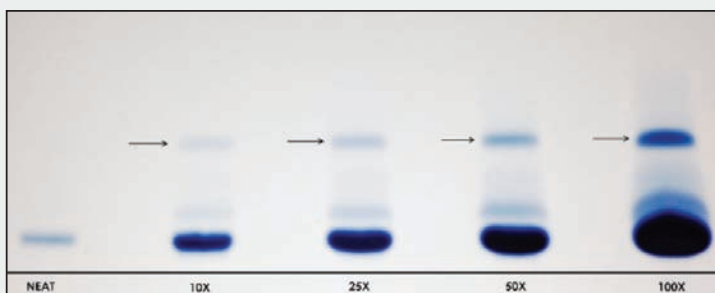
To download the CAP Calculation Table please visit: <http://www.vivaproducts.com/downloads/cap-recovery-table.xls>

## Performance Characteristics

Typical Performance 7,500 MWCO PES	BJP-5	BJP-10	BJP-20	BJP-20	BJP-5	BJP-10	BJP-20
	Time to concentrate 10x min. at 20°C				Concentrate recovery %		
Start Volume	5 ml	10 ml	10 ml	20 ml	5 ml	10 ml	10 ml
Albumin (66,000 MW) (0.25 mg/ml)	30	60	55	110**	92%	92%	92%
IgG (160,000 MW) (0.25 mg/ml)	35	70	65	130**	65%	68%	68%
	Time to concentrate 50x min. at 20°C				Concentrate recovery %		
Albumin (66,000 MW) (0.25 mg/ml)	40	80	75	150**	90%	90%	90%
IgG (160,000 MW) (0.25 mg/ml)	45	90	85	170**	56%	60%	60%

\*\* All 20 ml samples start at 0.10 mg/ml

### Concentration of Bence Jones or M Protein in Urine



Patterns for urine protein electrophoresis from a sample with starting total protein of 30 - 100 mg/dL. Albumin bands show on bottom and monoclonal free light chains (Bence Jones or M protein) show on top (see arrows). Sample is split and concentrated to increasing amounts as shown on bottom. Note that the Neat (unconcentrated) sample does not show a visible M protein band.

## Ordering Information

Type of Device	No. Tests	BJP-5	BJP-10	BJP-20
Individual device (no pipettes)	30	BJP-5/30	BJP-10/30	BJP-20/30
Individual device (with pipettes)	30	BJP-5/30P	BJP-10/30P	BJP-20/30P
Individual device (no pipettes)	100	BJP-5/100	BJP-10/100	BJP-20/100
Individual device (with pipettes)	100	BJP-5/100P	BJP-10/100P	BJP-20/100P
8 test block (no pipettes)	40	BJP-5/40	BJP-10/40	
8 test block (with pipettes)	40	BJP-5/40P	BJP-10/40P	

### Accessories:

Plastic disposable pipettes (qty of 250)	BJPA-P250
Plastic disposable pipettes (qty of 100)	BJPA-P100
Plastic disposable pipettes (qty of 40)	BJPA-P40
Plastic disposable pipettes (qty of 30)	BJPA-P30
Expansion reservoirs for use with BJP-20 devices (qty of 10)	BJPA-ER20
Acrylic stand for BJP individual units	BJPA-AS

Manufactured by: ProChem - A division of Vivaproducts  
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North American Distributors:  **vivaproducts**  
Protein Purification and Separation Technologies

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Visit our website [www.vivaproducts.com](http://www.vivaproducts.com) for pricing and on-line ordering!