

## **BJP Clinical Concentrators**

**Concentration of Clinical 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 microsolute through the ultrafilter concentrating the sample. A dead stop pocket at the bottom of each cell minimizes the chance to concentrate the sample to dryness. The BJP clinical concentrators are intended for *in vitro* diagnostic (IVD) applications and are labeled accordingly.

## **BJP Clinical 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	Benefits
Integrated dead stop	Minimal risk of sample concentration to dryness
Uses plastic instead of glass Pasteur pipettes	No glass breakage during sample removal.
Black print for graduations	Easy to read.
Large volume models hold up to 20 ml	Concentrate 100x in one cell and still have 100 µl for IFE tests.
Available as individual units or as 8 test blocks.	Individual units may be disposed after use. Blocks may have to be stored with sample residue

# Your Source for Clinical Concentrators Call us at 800-456-4633



## **Technical Specifications**

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

#### **Dimensions**

For BJP-5/30 & 5/100, BJP-10/30 & 10/100, BP-20/30 & 20/100 (All individual test units)

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

### For BJP-5/40, BJP-10/40 (8 test blocks)

	Width	147 mm	147 mm	NA
	Height	94 mm	94 mm	NA
	Depth	70 mm	70 mm	NA
Α	ctive membrane area	25 cm <sup>2</sup>	25 cm <sup>2</sup>	28 cm <sup>2</sup>
D	ead stop volume	50 μl	50 μl	50 μl

#### **Materials of Construction**

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

## **Equipment Required**

## Pipettes for Sample Transfer & Stands for Individual BJP Units

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

The BJP individual units require the acrylic stand accessory (Item BJPA-AS) which must be ordered separately.

## **Suggested Concentration Factors for Urine Samples**

For a BJP Concentration Factor Calculator please visit: www.vivaproducts.com/calculator.html

## **Suggested CAP Validation Procedures**

For Recommended Procedures please visit:

www.vivaproducts.com/downloads/lab-procedure-performing-the-test.pdf

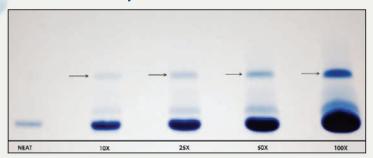
To download the CAP Calculation Table please visit: http://www.vivaproducts.com/downloads/cap-recovery-table.xls

## **Performance Characteristics**

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

<sup>\*\*</sup> 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)	ВЈР	A-P250				
Plastic disposable pipettes (qty of 100)	BJF	A-P100				
Plastic disposable pipettes (qty of 40)			A-P40			
Plastic disposable pipettes (qty of 30)			A-P30			

Manufactured by:

Acrylic stand for BJP individual units

Expansion reservoirs for use with BJP-20 devices (qty of 10)



BJPA-ER20

BJPA-AS