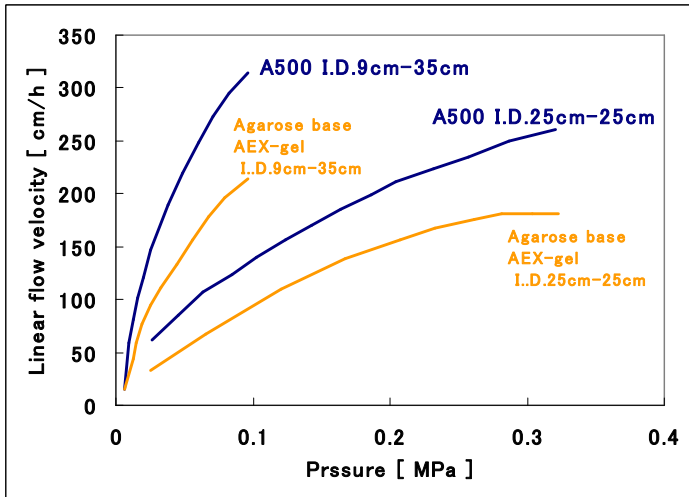


## Cellufine A-500

Cellufine A-500 can be used at high flow rates.



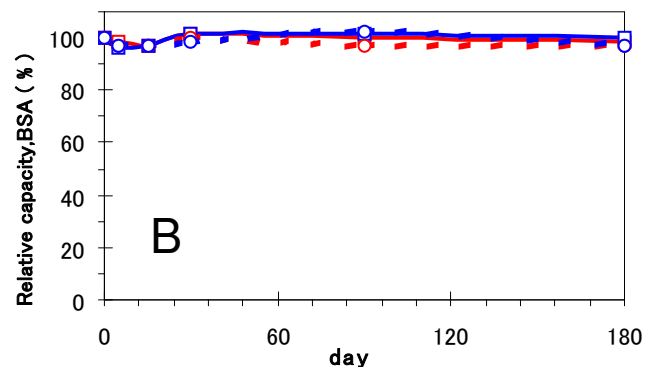
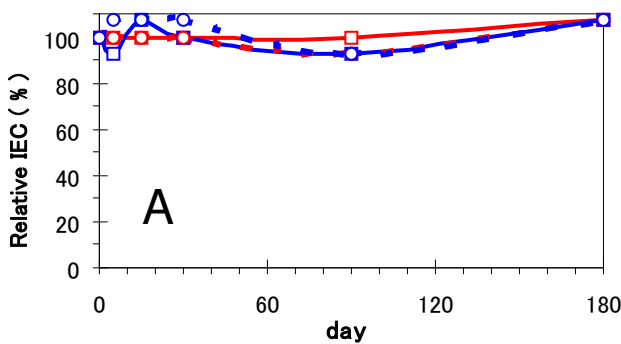
The flow/pressure curve for a Cellufine A-500 column confirms operating flow rates above 250 cm/h can be obtained at column size I.D.25cm.

**Fig1. Pressure-flow rate curve for Cellufine A-500.**

Column size : indicated on the figure

Mobile phase :0.01M phosphate buffer,pH7.2 at 25°C

## Cellufine A-500 is stable in alkali /acid



—□— 4°C/0.2M HCl      —□— 4°C/0.5M NaOH  
-○- 20°C/0.2M HCl      -○- 20°C/0.5M NaOH

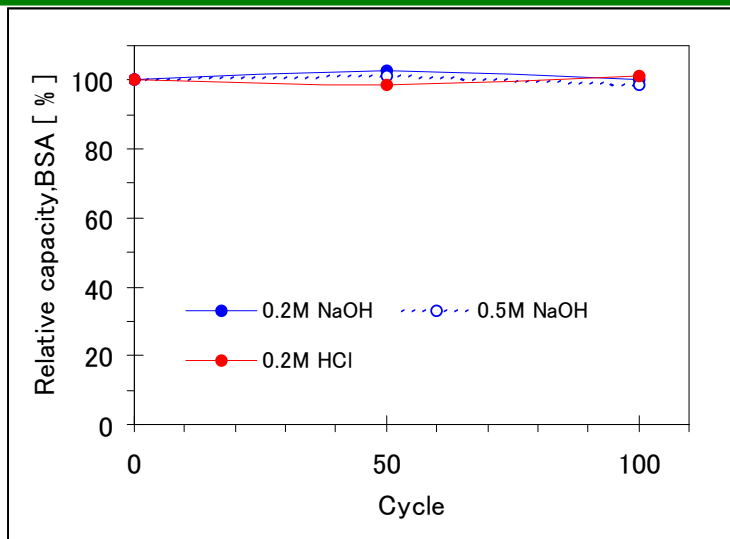
—□— 4°C/0.2M HCl      —□— 4°C/0.5M NaOH  
-○- 20°C/0.2M HCl      -○- 20°C/0.5M NaOH

Figure A: affection of ion exchange capacity ( IEC )

Figure B: affection of the adsorption capacity of bovine serum albumin( BSA ).

When stored in 0.2M HCl and 0.5M NaOH for 180 days at 4°C and 20°C, both the adsorption capacity and IEC are stable.

The graphs show relative comparison to virgin product (as 100%).



**Cellufine A-500 performance remains constantly at least 100 operating cycles.**

The data to the left shows 100 Cleaning in Place (CIP) cycles followed by cleaning in NaOH or HCl. The adsorption capacity of BSA does not change before and after 50 times and 100 times cleaning.

**Fig4. Stability by repeat cleaning (CIP) of Cellufine A-500.**  
 column : I.D.4.4cm-bead height 25cm Flow rate : 38cm/hr at 20°C  
 buffer : 0.01M sodium phosphate , pH7.2  
 regeneration solution : 0.2M NaOH or 0.5M NaOH or 0.2M HCl  
 Cycle 1)buffer 3CV ;2)regeneration solution 3CV

- ✓ **Cellufine A-500 is autoclaveable.**
  - It is recommended that autoclaving at 121°C 20 min. in a neutral, low salt buffer.
- ✓ **Cellufine A-500 conforms to USP28, Plastic Class V.**

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