

# Toyopearl AF-rProtein A-650F Resin

TOYOPEARL  
PRODUCT OVERVIEW

## Introduction

Toyopearl AF-rProtein A-650F is a new affinity resin using an alkaline resistant recombinant Protein A variant. This new non-animal derived ligand is bound using multi-point attachment. The Toyopearl HW-65F base support is a 45 micron methacrylic bead with a 1000Å nominal pore size. The new resin exhibits low ligand leakage in the range of 5-25ng/mg Protein A (by ELISA).

## Product Highlights

### Good capacities even at low residence times:

- Static binding capacity (SBC) of >45g/L
- Dynamic binding capacities (DBC) of 30g/L and higher at residence times greater than 2 minutes (Figure 1)
- DBC >25g/L at residence times between 1.5-2 minutes
- Works very well with high titer IgG feedstocks (up to 10g/L)

### Excellent alkaline resistance and temperature stability:

- Excellent capacity retention using 0.1mol/L NaOH for CIP (Figure 2)
- Maintains capacity well using 0.5mol/L NaOH for CIP (Figure 3)
- Resistant to extended exposure to 0.1mol/L NaOH (Figure 4)
- Consistent temperature stability up to 90°C (Figure 5)

### Readily compatible with high linear velocities (Figure 6):

- Stable to pressures up to 3bar
- Readily usable at low residence times

Figure 1. DBC as a Function of Residence Time

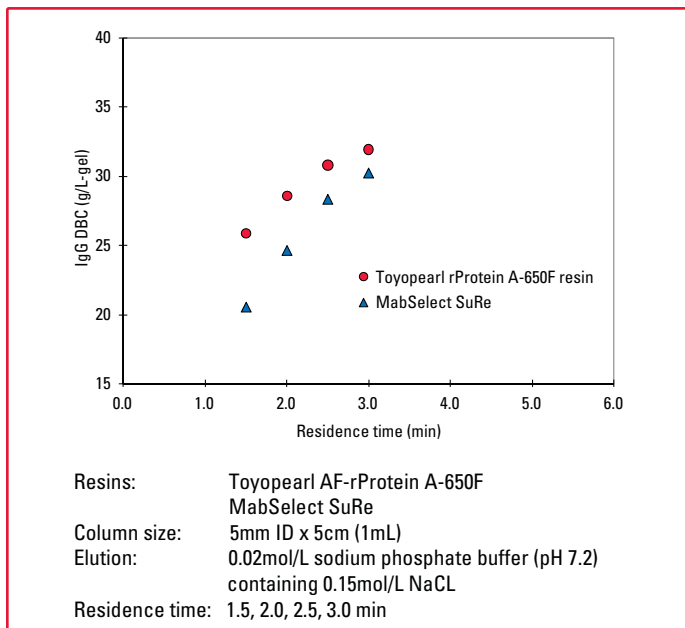


Figure 2. CIP Stability to 0.1mol/L NaOH

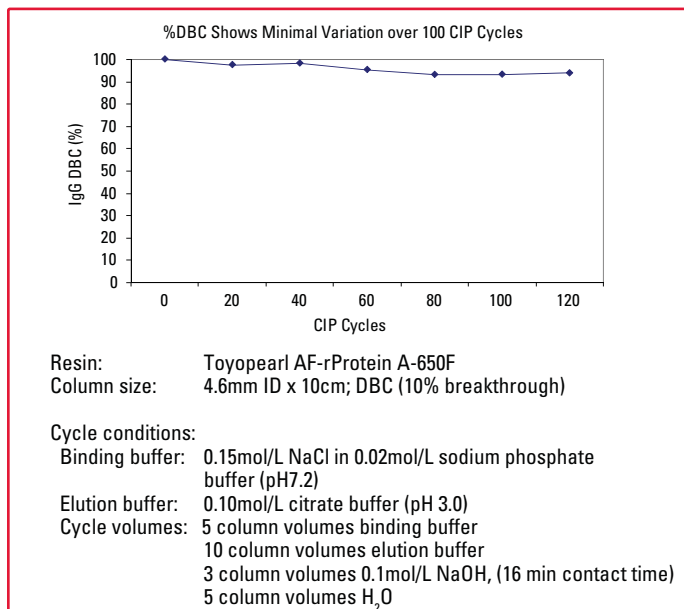
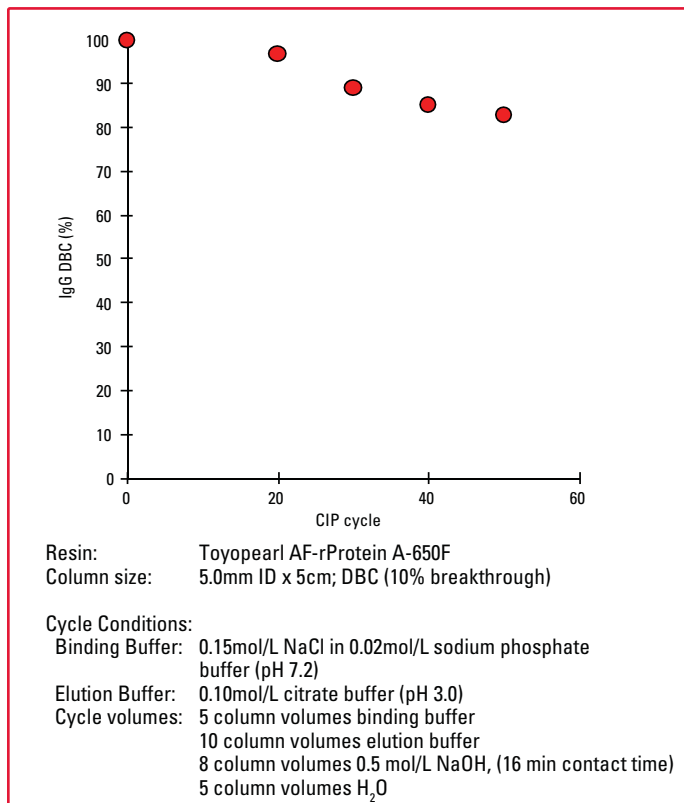
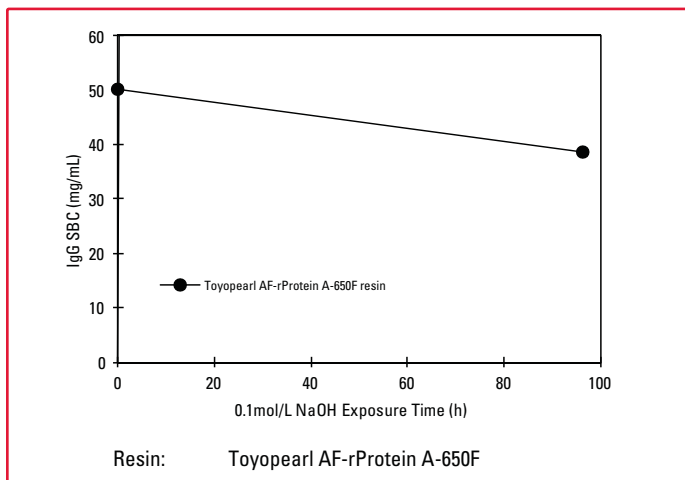


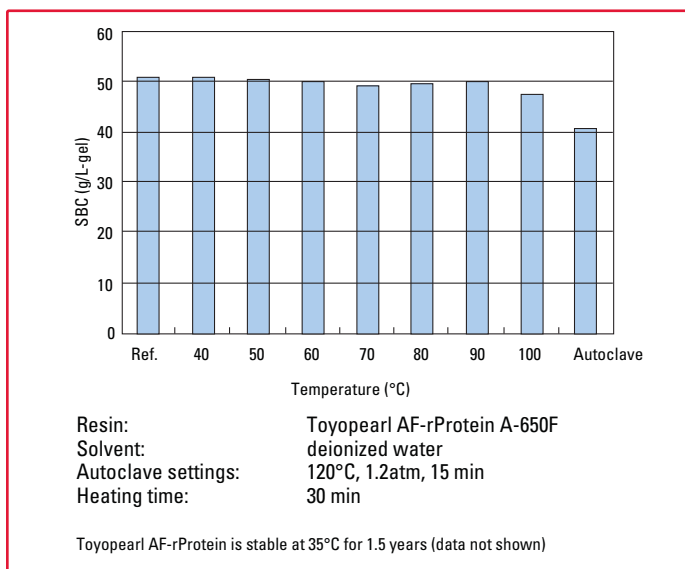
Figure 3. CIP Stability to 0.5mol/L NaOH



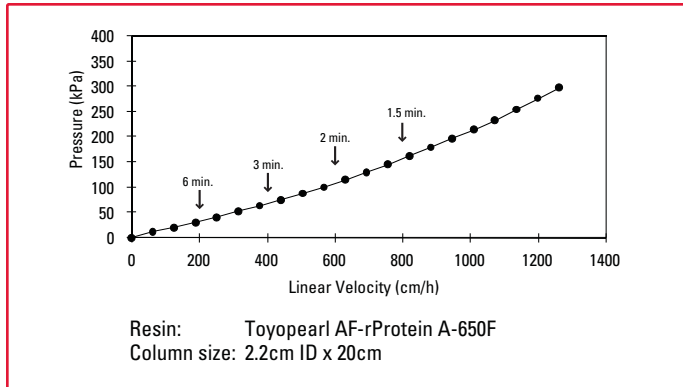
**Figure 4.** SBC as a Function of Exposure Time in 0.1mol/L NaOH



**Figure 5.** Temperature Stability



**Figure 6.** Pressure-Flow at Various Linear Velocities and Residence Times



### Ordering Information

Part #	Description	Resin Vol.
22803	<b>Toyopearl AF-rProtein A-650F</b>	10mL
22804	<b>Toyopearl AF-rProtein A-650F</b>	25mL
22805	<b>Toyopearl AF-rProtein A-650F</b>	100mL
22806	<b>Toyopearl AF-rProtein A-650F</b>	1L
22807	<b>Toyopearl AF-rProtein A-650F</b>	5L
22808	<b>Toyopearl AF-rProtein A-650F</b>	50L
22809	<b>ToyoScreen AF-rProtein A-650F</b>	1mL X 5 ea.
22810	<b>ToyoScreen AF-rProtein A-650F</b>	5mL X 1 ea.
22811	<b>ToyoScreen AF-rProtein A-650F</b>	5mL X 5 ea.
22815	<b>ELISA Test Kit*</b>	

\* This kit is specifically prepared for Toyopearl AF-rProtein A-650F. Test kits for other commercially available Protein A products may not work properly for Toyopearl AF-rProtein A-650F



TOSOH

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