## Toyopearl ${ }^{\circledR}$ PPG-600

for Hydrophobic Interaction Chromatography of Monoclonal Antibodies, Hydrophobic Proteins, and Pegylated (polyethylene glycol modified) Targets

## Introduction

Toyopearl PPG-600 is a unique hydrophobic interaction resin offered by Tosoh Bioscience. It is based on the same hydroxylated methacrylic polymer chemistry as the traditional Toyopearls, but with a novel polyether phase. The polyether ligand makes the resin more hydrophobic than Toyopearl Ether-650 but less hydrophobic than Toyopearl Phenyl-650. The $750 \AA$ pore size is optimized for IgG and Toyopearl PPG-600 shows high IgG dynamic binding capacity, good selectivity from albumin, and exceptional mass and activity recovery.

This intriguing resin enables Tosoh Bioscience to offer a "Six-PaK" of resins for hydrophobic interaction chromatography:
(in order of increasing ligand hydrophobicity)

## Ether-650 < PPG-600 < Phenyl-650 < SuperButyl-550 < Hexyl-650 Butyl-650

Dynamic Binding Capacity


## Product Highlights

- pore size optimized for monoclonal antibody separations
- good to high dynamic binding capacity with typically greater than 95\% mass recovery
- retention of high biological activity
- excellent selectivity between albumin and monoclonals

NOTE: As resin hydrophobicity increases some target molecules may demonstrate lower mass recovery or activity. So selecting the best resin for a particular molecule is normally a balance of its binding capacity, selectivity, and recovery for a given media. By offering 6 ligand/pore size combinations for HIC Tosoh Bioscience offers a rainbow of selectivities for customer evaluation.

In addition to the monoclonal applications, the Toyopearl PPG-600 polyether ligand also excells with hydrophobic proteins between 20150 kDa in size. Certain pegylated molecules also may take advantage of its unique selectivity.

Selectivity


Selectivity


## Specifications

| Particle Size Distribution | Min. $80 \%(50-150 \mu \mathrm{~m})$ |
| :---: | :---: |
| Pressure Drop | Max 22 kPa <br> (at $37.8 \mathrm{~mL} / \mathrm{min})$ |
| Protein Adsorption <br> Capacity | $20-35 \mathrm{~g} / \mathrm{L}$ <br> (of $\gamma$-globulin) |
| Protein Elution Volume |  |
| BSA |  |
| IgG1 (Anti-LH MAb) | $43-53 \mathrm{~mL}$ |

## Ordering Information

| Part \# | Description | Resin Vol. |
| :---: | :---: | :---: |
| 21301 | Toyopearl PPG-600M | 25 mL |
| 21302 | Toyopearl PPG-600M | 100 mL |
| 21303 | Toyopearl PPG-600M | 1 L |
| 21304 | Toyopearl PPG-600M | 5 L |
| 21305 | Toyopearl PPG-600M | 50 L |

## TOSOH BIOSCIENCE

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