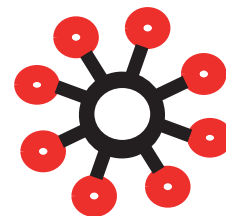
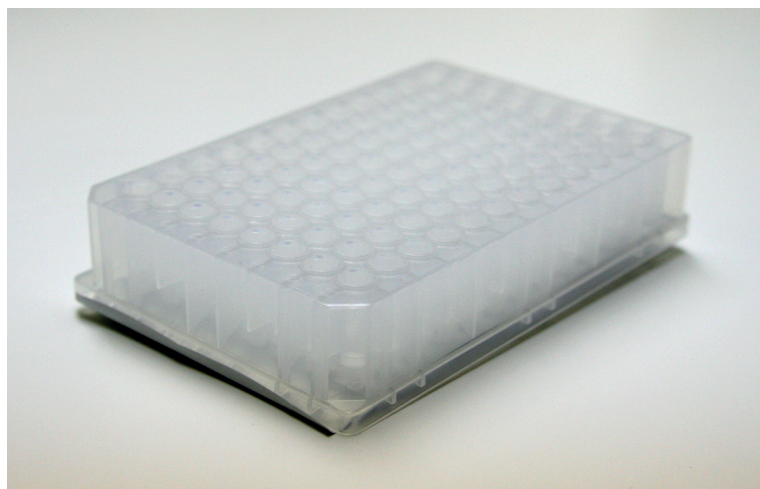


# Resin Seeker MMC 96-well Plate Kit



P/N OC41MDTRP-96

*A method development kit for Mixed Mode Chromatography (MMC)*

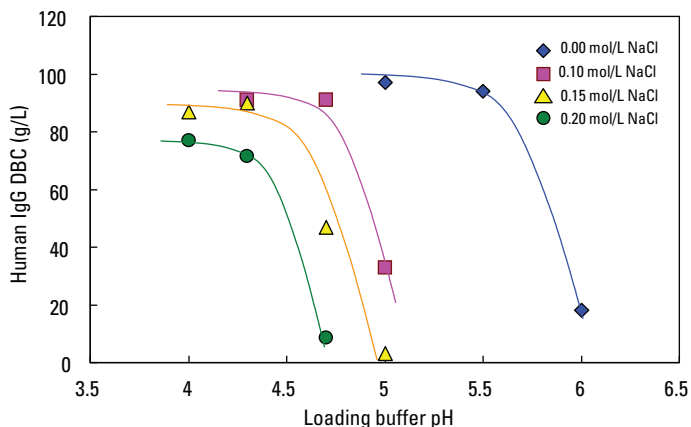


	1	2	3	4	5	6	7	8	9	10	11	12
A	●	●	●	●	●	●	●	●	●	●	●	●
B	●	●	●	●	●	●	●	●	●	●	●	●
C	●	●	●	●	●	●	●	●	●	●	●	●
D	●	●	●	●	●	●	●	●	●	●	●	●
E	●	●	●	●	●	●	●	●	●	●	●	●
F	●	●	●	●	●	●	●	●	●	●	●	●
G	●	●	●	●	●	●	●	●	●	●	●	●
H	●	●	●	●	●	●	●	●	●	●	●	●

20  $\mu$ L resin volumes

Each kit includes both  
a collection and a wash plate.

## Effect of Buffer and pH on Dynamic Binding Capacity

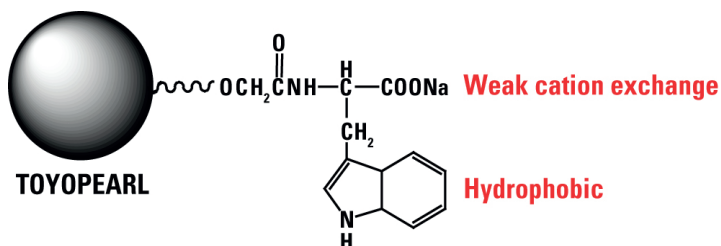


Resin: TOYOPEARL MX-Trp-650M  
 Column size: 6 mm ID  $\times$  4 cm  
 Mobile phase: Buffer A: 0.05 mol/L acetate buffer (pH 4.0 - 6.0) +  
 0 - 0.2 mol/L NaCl  
 Buffer B: 0.1 mol/L Tris-HCl buffer (pH 8.5) +  
 0.3 mol/L NaCl  
 Flow rate: 1.0 mL/min (212 cm/hr)  
 Detection: UV @ 280 nm  
 Sample: human polyclonal IgG (1 mg/mL)

Dynamic binding capacity (DBC) calculated from  
10% height of breakthrough curve

## Resin Structure

TOYOPEARL<sup>®</sup> MX-Trp-650M Mixed Mode Resin



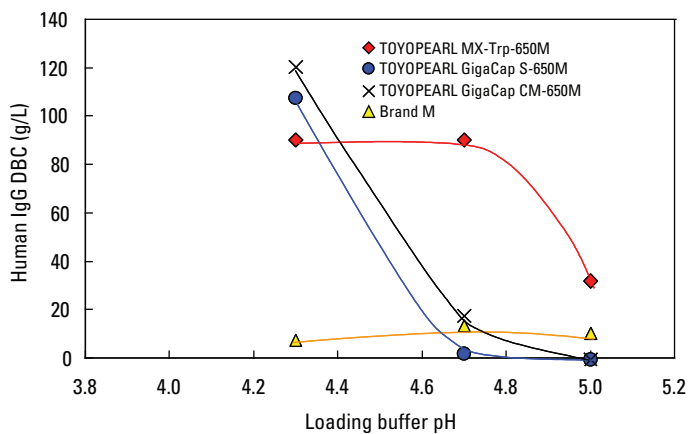
Product name: TOYOPEARL MX-Trp-650M  
 Particle size: 50-100  $\mu$ m

## DBC and Recovery of IgG

Resin	IgG DBC 12 mS/cm	Recovery (%) 12 mS/cm	IgG DBC 17 mS/cm	Recovery (%) 17 mS/cm
<b>TOYOPEARL MX-Trp-650M</b>	95	97%	48	96%
<b>Capto MMC</b>	14	86%	11	85%

Resins: TOYOPEARL MX-Trp-650M, Capto<sup>®</sup> MMC  
 Column size: 6 mm ID × 4 cm  
 Mobile phase: Buffer (12 mS/cm): 0.05 mol/L acetate buffer (pH 4.7) + 0.1 mol/L NaCl  
 Buffer (17 mS/cm): 0.05 mol/L acetate buffer (pH 4.7) + 0.15 mol/L NaCl  
 Flow rate: 212 cm/hr  
 Detection: UV @ 280 nm  
 Sample: polyclonal IgG

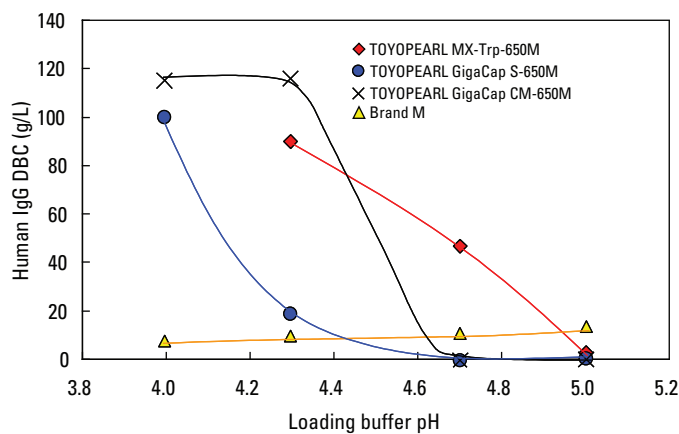
### DBC Comparison at 12 mS/cm



Resins: TOYOPEARL MX-Trp-650M  
 TOYOPEARL GigaCap<sup>®</sup> S-650M  
 TOYOPEARL GigaCap CM-650M  
 Brand M  
 Column size: 6 mm ID × 4 cm  
 Mobile phase: Buffer A: 0.05 mol/L acetate buffer (pH 4.3, 4.7, 5.0) +  
 0.10 mol/L NaCl (12 mS/cm)  
 Buffer B: 0.1 mol/L Tris-HCl buffer (pH 8.5) +  
 0.3 mol/L NaCl  
 Flow rate: 1.0 mL/min (212 cm/hr)  
 Detection: UV @ 280 nm  
 Sample: human polyclonal IgG (1 mg/mL)

Dynamic binding capacity (DBC) calculated from  
 10% height of breakthrough curve

### DBC Comparison at 17 mS/cm



Resins: TOYOPEARL MX-Trp-650M  
 TOYOPEARL GigaCap S-650M  
 TOYOPEARL GigaCap CM-650M  
 Brand M  
 Column size: 6 mm ID × 4 cm  
 Mobile phase: Buffer A: 0.05 mol/L acetate buffer (pH 4.0, 4.3, 4.7, 5.0) +  
 0.15 mol/L NaCl (17 mS/cm)  
 Buffer B: 0.1 mol/L Tris-HCl buffer (pH 8.5) +  
 0.3 mol/L NaCl  
 Flow rate: 1.0 mL/min (212 cm/hr)  
 Detection: UV @ 280 nm  
 Sample: human polyclonal IgG (1 mg/mL)

Dynamic binding capacity (DBC) calculated from  
 10% height of breakthrough curve