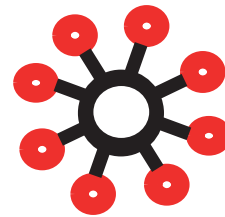


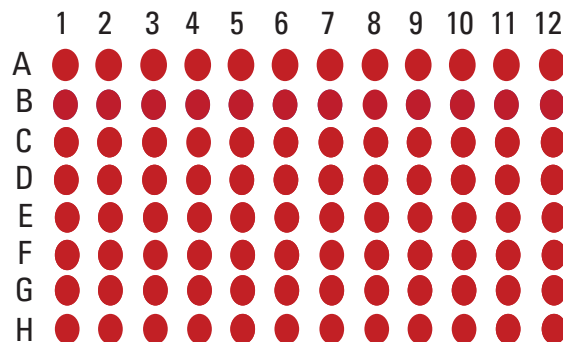
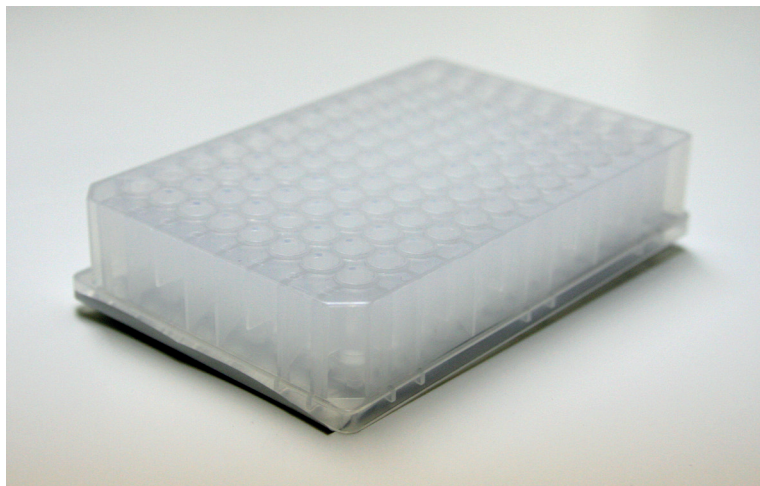
# Resin Seeker

# CaPure-HA™ 96-well Plate Kit



P/N OC41MDCPHA

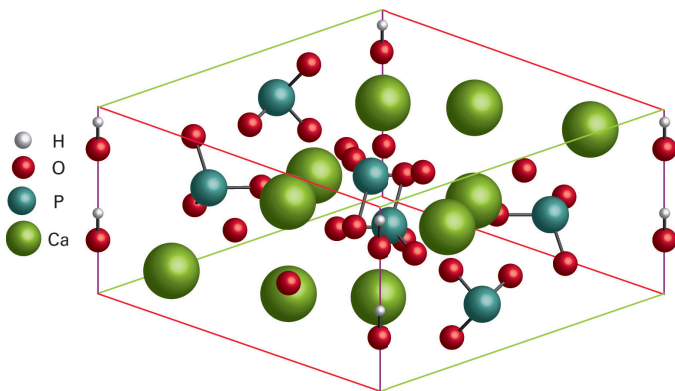
*A method development kit for Anion Exchange Chromatography (AEX)*



20 µL resin volumes

Each kit includes both  
a collection and a wash plate.

## CaPure-HA Structure



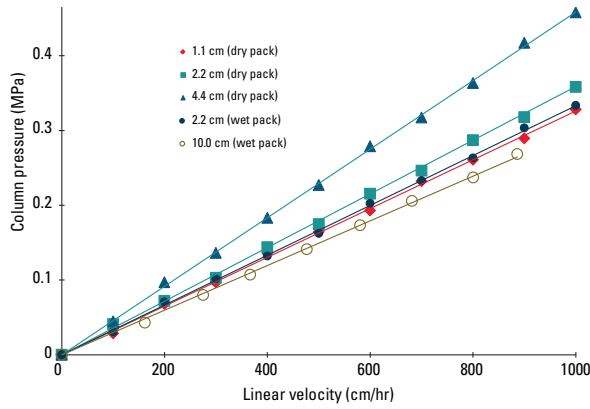
CaPure-HA ( $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$ ) is a form of calcium phosphate used in the chromatographic separation of biomolecules.

## CaPure-HA Resin Properties

Bead matrix	Hydroxyapatite $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$
Particle size (mean)	39 µm
Dynamic binding capacity	> 30 g/L human IgG (2 min residence time) > 20 g/L lysozyme (2 min residence time)
Pressure rating	10 MPa (max)
Bead density	≥ 0.5 g/mL
Caustic stability	> 50 CIP cycles in 0.5 mol/L NaOH
Storage solution	Dry powder or 0.1 to 0.5 mol/L NaOH

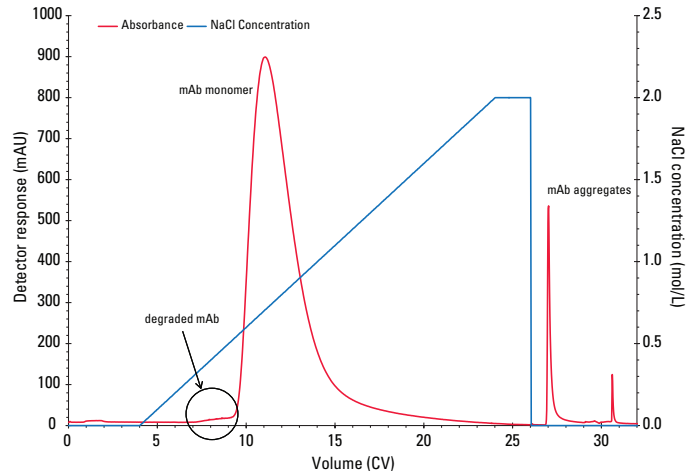
# CaPure-HA Performance

## CaPure-HA Mechanical Stability



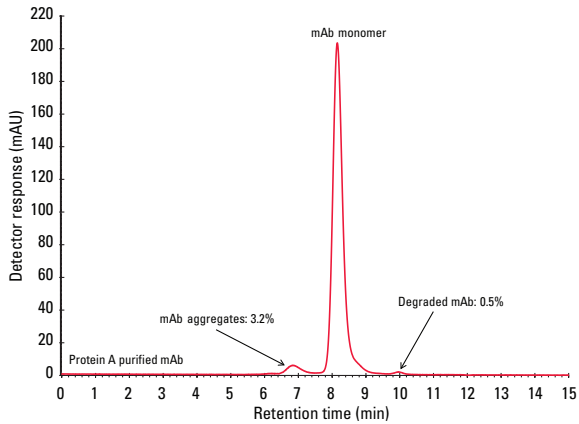
Resin: CaPure-HA  
 Column size: 1.1 cm ID × 19.3 cm (dry pack)  
 2.2 cm ID × 20.3 cm (dry pack)  
 4.4 cm ID × 19.3 cm (dry pack)  
 2.2 cm ID × 20.6 cm (wet pack)  
 10.0 cm ID × 21.3 cm (wet pack)  
 Mobile phase: 5 mmol/L sodium phosphate, pH 7.2  
 Linear velocity: as noted  
 Detection: pressure (MPa)

## Purification of mAb on CaPure-HA column



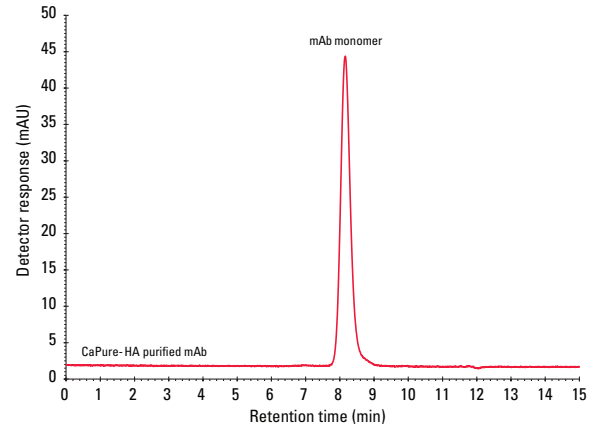
Resin: CaPure-HA  
 Column size: 1.0 cm ID × 10 cm (7.85 mL)  
 Mobile phase: A: 5 mmol/L sodium phosphate, pH 6.8  
 B: mobile phase A + 2.0 mol/L NaCl  
 Gradient: 0-100% mobile phase B (20 CV)  
 Flow rate: 3.93 mL/min (300 cm/hr)  
 Detection: UV @ 280 nm  
 Sample: protein A purified mAb, 10.0 g/L  
 Sample load: 10.0 g/L-resin

## SEC analysis of mAb prior to aggregate removal by CaPure-HA



Column: TSKgel® G3000SW<sub>XL</sub>, 7.8 mm ID × 30 cm  
 Mobile phase: 0.2 mol/L phosphate buffer, pH 6.8  
 Gradient: isocratic  
 Flow rate: 1 mL/min  
 Detection: UV @ 280 nm  
 Injection vol: 20 µL  
 Sample: protein A purified mAb IgG<sub>1</sub>

## SEC analysis of purified mAb monomer from CaPure-HA



Column: TSKgel G3000SW<sub>XL</sub>, 7.8 mm ID × 30 cm  
 Mobile phase: 0.2 mol/L phosphate buffer, pH 6.8  
 Gradient: isocratic  
 Flow rate: 1 mL/min  
 Detection: UV @ 280 nm  
 Injection vol: 20 µL  
 Sample: CaPure-HA purified mAb IgG<sub>1</sub>