



Purexa™ PrA

for Antibody Purification



Purexa PrA affinity membranes utilize a convection-based mechanism to improve efficiency, purity and yield. Our membranes avoid pore diffusion complications while shortening processing times.

How Purexa PrA Works

Purexa PrA is our solution for Protein A antibody purification. Successfully separate target antibodies from the residual DNA and host cell proteins. Utilizing affinity-based chromatography, our porous membranes are functionalized for better purification.



Convection-based mechanism

H₂O + Sugar + Stir



Diffusion-based mechanism

H₂O + Sugar + Hours of Time

This simple but effective example demonstrates how a convection-based process is much faster than that of diffusion.

Superior productivity: up to 10x with Purexa PrA

- + Higher dynamic binding capacity at shorter residence times
- + High antibody recovery with low residual DNA and host cell proteins
- + Consistent performance over multiple bind and elute cycles
- + Easier setup and breakdown

HPLC Purity Analysis

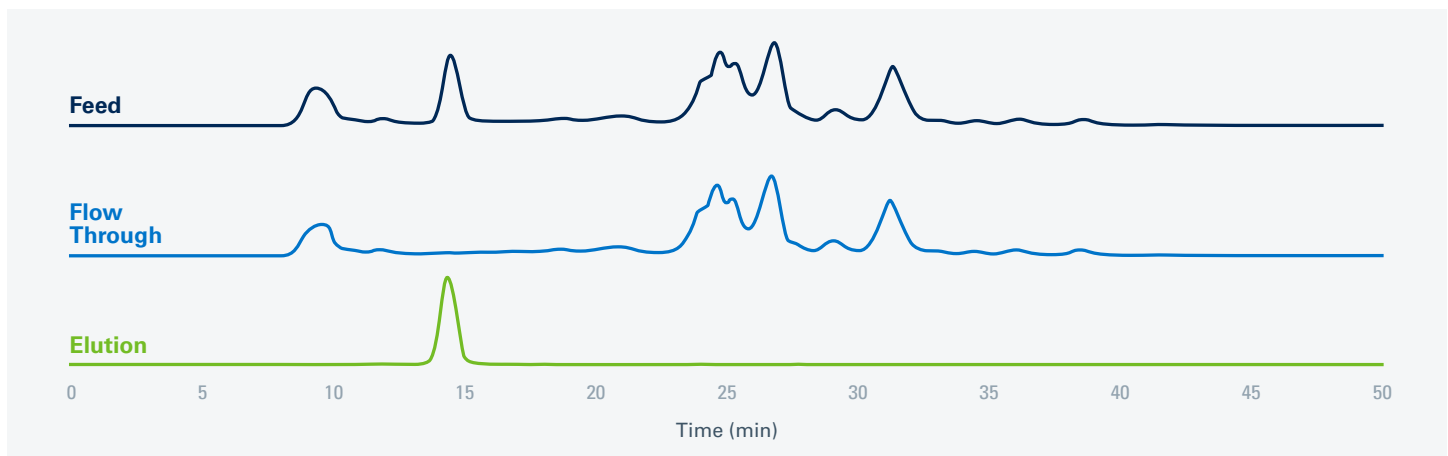


Figure 1. HPLC visualization of selective isolation of antibody from supernatant feed.

Increase Productivity with Purexa PrA

Compared to magnetic and resin beads, Purexa PrA affinity membrane chromatography is unaffected by pore diffusion and has no incubation time with overall shorter processing times. Purexa PrA can operate at rapid flow rates to enhance productivity while maintaining high purity eluates.

Concentration Isn't Affecting DBC

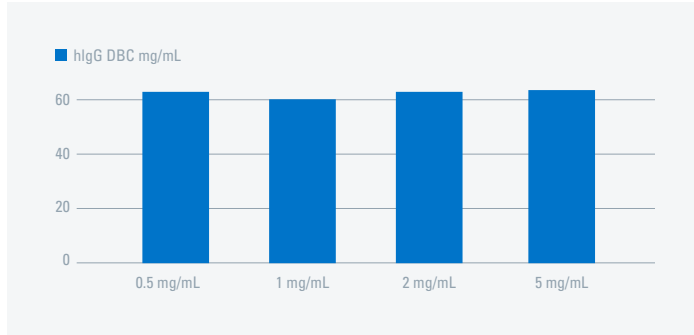


Figure 2. No decrease in dynamic bonding capacity (DBC) is observed with increasing concentrations of the antibody (mAb).

Higher DBC Than Resins, at High Flow Rates

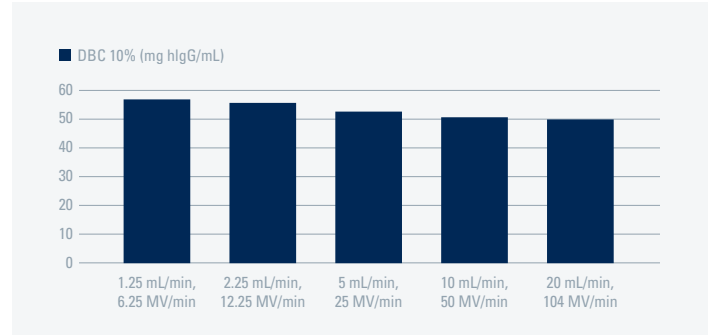


Figure 3. Flow Rate (mL/min), Membrane Volumes per minute (MV/min). Even at higher flow rates (20 mL/min), the dynamic bonding capacity (DBC) of Purexa PrA remains high.

Multiple Cycle Consistency

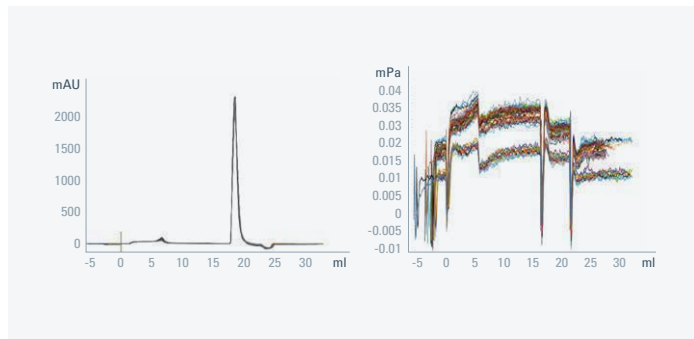


Figure 4. Purexa PrA is reusable, maintaining consistent elution performance (left) and consistent pressure levels (right) over repeated run cycles.

	Volume	Suggested Flow Rate	Binding per Unit: hlgG
Column	Maxi: 0.22 µL	2-10 mL/min	4-8 mg
Cassette	2 ml	4-20 mL/min	80 mg
	10 ml	20-100 mL/min	400 mg
Well Plate	24 Well Plate (10 mL per well)	1-2 bar operating pressure	2-2.5 mg per well

Buffer: 1x PBS (Phosphate Buffered Saline), pH = 7.3

Elution: 100 mM Sodium Acetate or Citric Acid, pH = 3.0

Interested in sampling, purchasing or speaking with our expert staff?

Email us at contact@purilogs.com.



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