

Case study

Performance of Protein A resins for different mAbs

INTRODUCTION

A biotech company manufacturing biosimilars works with a wide variety of antibodies and needed process efficiency solutions.

CHALLENGE

The challenges here were twofold: to provide a single affinity resin to purify a wide variety of antibodies and to maximize yield and purity.

AVANTOR SOLUTION

After exploring resins and process conditions for the purification of different recombinant mAbs, Avantor provided sample columns to the customer to perform an experiment.

RESULT – VALUE TO CUSTOMER

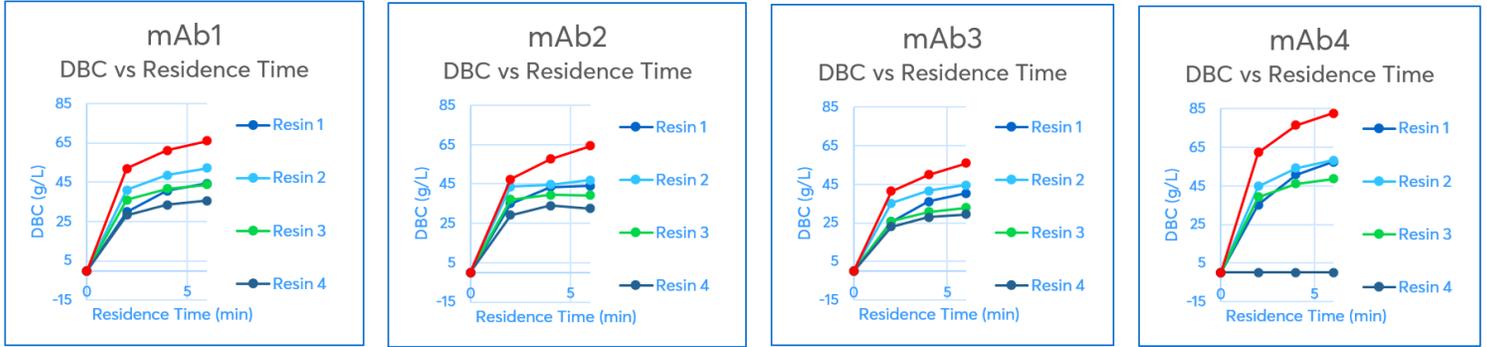
In the experiment, PROchievA™ showed a 30-100% higher capacity compared to other Protein A resins and excellent impurity clearance capability.

CUSTOMER BENEFIT

The results indicated that PROchievA™ can enhance dynamic binding capacity and purity while driving efficiency with DBC and impurity clearance that outperform competing resins.



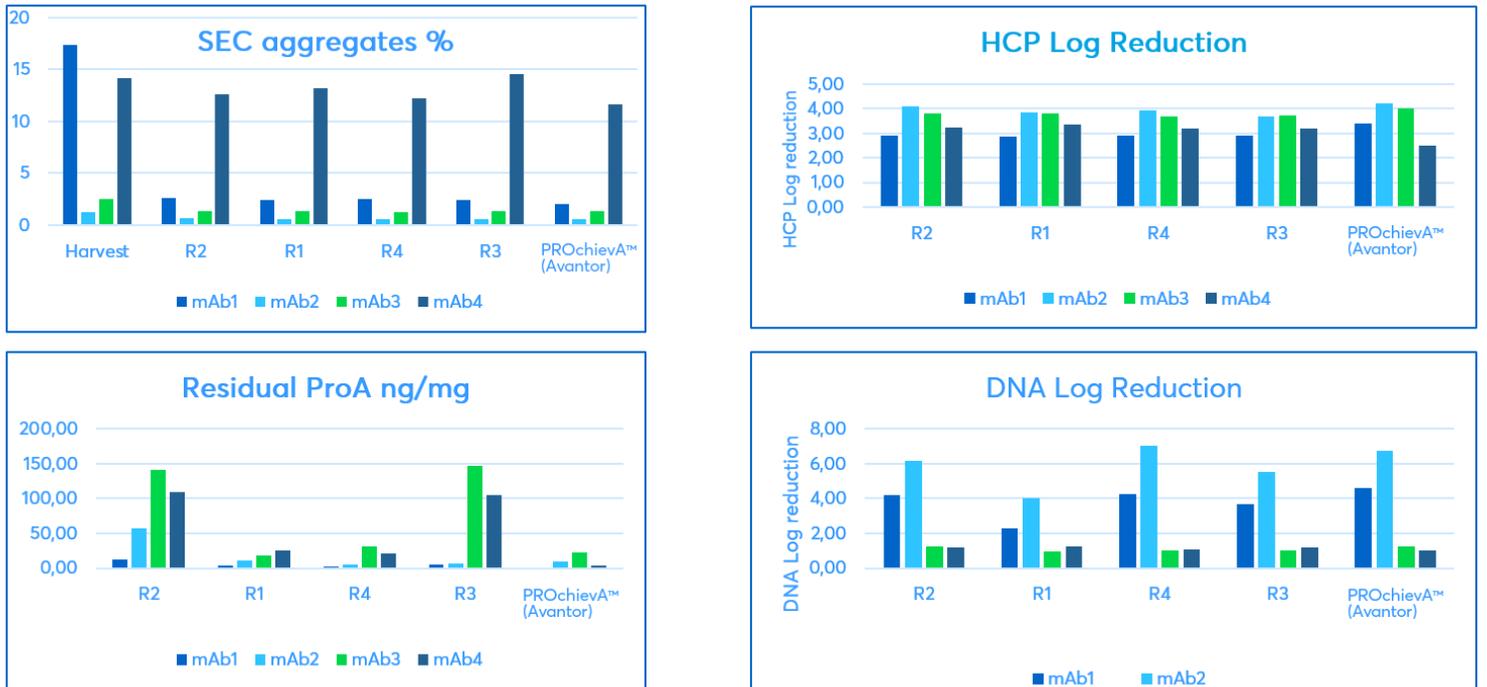
Performance of Protein A resins for different mAbs



Outcome

The study demonstrated best-in-class performance in mAb-binding capability. This study was performed with a 1 mL column using harvest of various mAbs. DBC was measured at 10% breakthrough by quantifying protein amount in the flowthrough fractions.

Performance of Protein A resins to remove impurities for different mAbs



Outcome

PROchievA™ showed competitively better impurity clearance capability.