

Agilent Bio-Monolith Protein A and Protein G Affinity Columns

WIDER SELECTIVITY FOR mAb QUANTITATION AND ANALYSIS

The Measure of Confidence



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Agilent Technologies

DETERMINE MAB TITERS QUICKLY AND ACCURATELY

The ability to measure monoclonal antibody (mAb) titers and to purify small amounts of product candidate for further characterization is essential for the development of an economic production process.

Agilent Bio-Monolith Protein A and Protein G columns deliver consistently excellent performance under the conditions encountered during method development, optimization, and production. These columns are ideal for titer determination during process development, cell clone selection, and optimization of the fermentation conditions, and in production to determine the optimum time to harvest – helping to ensure correct cell line choice and identification of harvest times to increase process yield and economics.

- Fast separations decrease method development time and costs and provide a larger window of opportunity for harvest.
- High binding capacity allows titer determination across relevant concentration ranges and enables purification for further characterization.
- Now with the new Protein G Monolith column there is a wider range of selectivity for IgG subclasses.
- Long column life and minimal clogging, even with complex samples, means less frequent column cleaning and replacement.

Wide concentration range

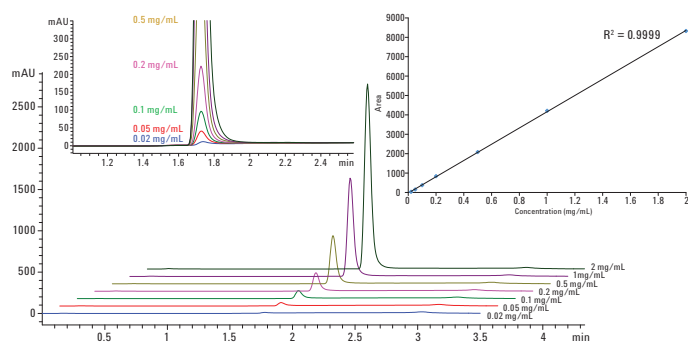


Figure 1. Linearity of IgG1 quantitation achieved using the Agilent Bio-Monolith Protein A column over the typical mAb titer range encountered with CHO cells.

An unusual shape? Perhaps.

But Agilent Bio-Monolith Protein A and Protein G columns deliver the high capacity and performance you need for reproducible affinity chromatography.



AGILENT BIO-MONOLITH PROTEIN A AND PROTEIN G AFFINITY COLUMNS

Proven specificity

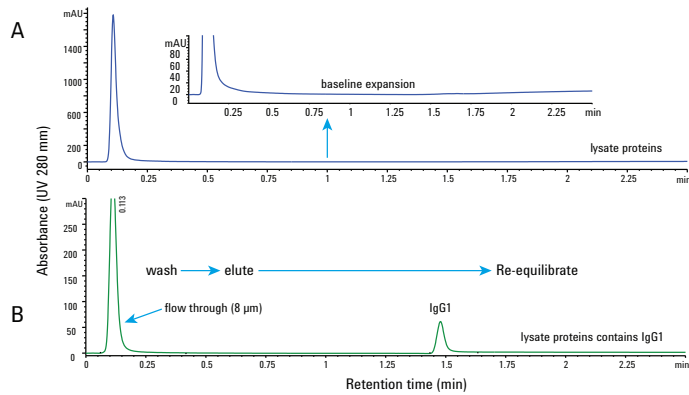


Figure 2. Rapid and specific capture of IgG1 from cell culture supernatant using the Bio-Monolith Protein A column. (A) *Escherichia coli* cell lysate supernatant (2 μg of IgG1 and 38 μg of cell lysate proteins of μg total) was loaded onto the column.

Long column life

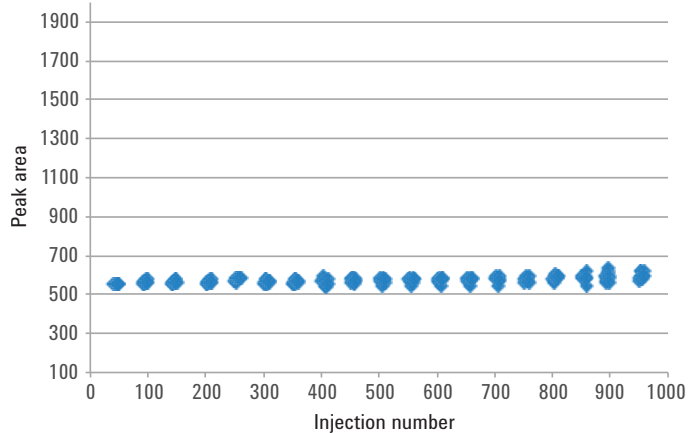
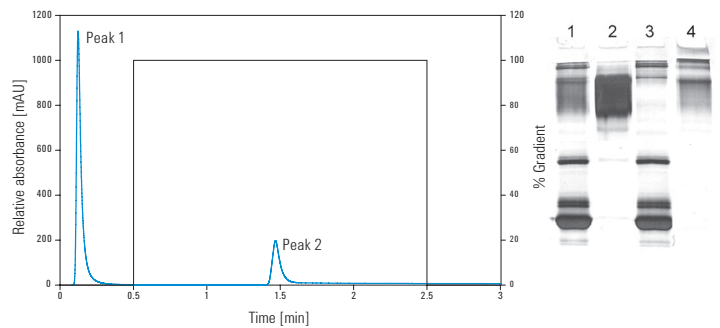


Figure 3. Lifetime of the Agilent Bio-Monolith Protein G column is demonstrated over 1000 cycles of IgG3 binding and elution. Reproducibility of peak area enables accurate quantitation of the IgG3 titer.

Reliable accuracy with large capacity



Key:

- Lane 1:** Whole serum prior to separation
- Lane 2:** IgG standard
- Lane 3:** Peak 1 (flow-through fraction)
- Lane 4:** Peak 2 (protein A-bound fraction; i.e. IgG1 and IgG2)

Figure 4. Rapid human polyclonal IgG quantitation from human plasma using the Bio-Monolith Protein A column. IgG was bound and a 100% buffer B step gradient was applied; IgG eluted at 1.5 minutes.

Ordering information

Agilent Bio-Monolith Protein A and Protein G Columns

Description	Part Number
Bio-Monolith Protein A, 4.95 x 5.2 mm	5069-3639
Bio-Monolith Protein G, 4.95 x 5.2 mm	5190-6900

Learn more

[http://www.agilent.com/chem/ AdvanceBio](http://www.agilent.com/chem/AdvanceBio)

Order your Agilent Bio-Monolith Protein A and Protein G columns now at

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