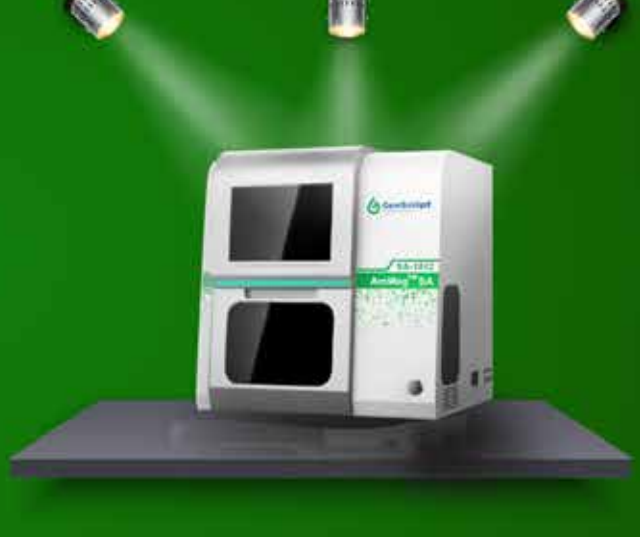
AmMag™ SA, semi-automated purification system

Purify large number of protein or antibody samples in hours instead of days



Features and benefits:

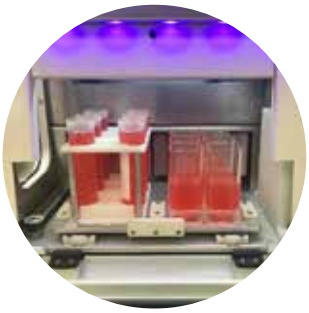
- Shorten the purification time
- Save time and labor
- Eliminate the need for centrifugation and filtration
- Complete washing and elution process automatically
- Closed environment to avoid endotoxin contamination

System capabilities:

- Purify up to 12 samples at a time
- Sample volumes from 5 mL to 50 mL
- Isolate as much as 200 mg of protein or antibody per sample
- Typical cycle time for 12 samples is less than 30 minutes
- The instrument is programmable to accommodate different protocols

1 **Transfer magnetic beads directly into cell cultures**

Binding step
(No centrifugation or filtration)



2 **Place the samples into AmMag SA**

3

Customize purification protocol using the touch screen:

- Select plate type (50 mL or six well plate).
- Select buffer volumes.
- Run the program to wash the magnetic beads and elute the samples.
- At the end of the run, pipette out the eluted samples.

Optional features:

- Sterilize the chamber with UV.
- Clean magnetic beads with NaOH (only applicable for alkaline tolerant AmMag protein A magnetic beads).

GenScript
Make Research Easy

Simplify your antibody purification with magnetic beads

Save time

- **Avoid centrifugation and filtration steps**
  Beads are able to bind target proteins and antibodies from crude samples, eliminating the need for filtration and centrifugation.
- **Faster procedure**
  AmMag SA provides efficient washing of magnetic beads in minutes by utilizing our patent-pending **MagRinse™ technology.**

Case study: Antibody purification from 12 samples using AmMag SA vs. FPLC

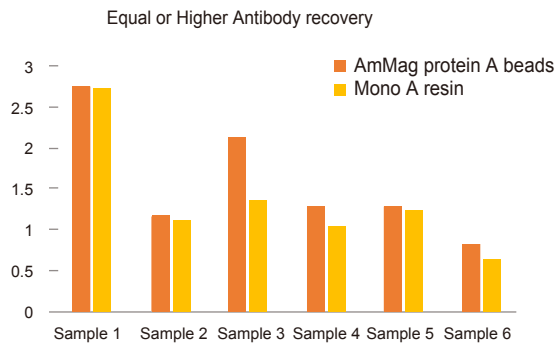
In this case study, we used twelve samples of CHO cell cultures expressing hIgGs for antibody purification. Parallel purifications were set up using AmMag protein A magnetic beads with AmMag SA, and GenScript's Monofinity protein A columns with FPLC. The binding capacity of both the magnetic beads and the resin used was 40 mg/mL. For the magnetic beads-based purification, magnetic beads were cleaned for 1 hour using 0.1 M NaOH, washed with 1X PBS, and added directly to the cell cultures the day before purification. The magnetic beads were incubated with cell cultures overnight* with shaking. For column purification, samples were passed through the resin as per protocol. The magnetic beads technology reduced the purification time to 31 minutes.

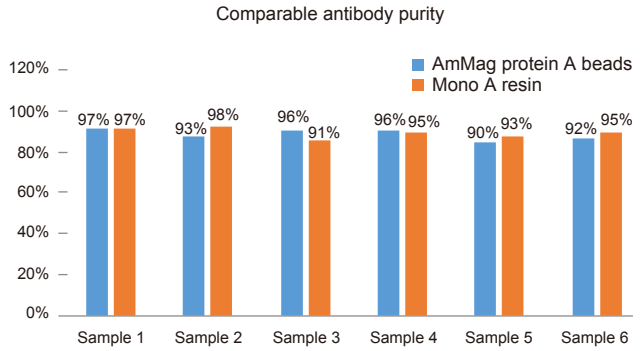
	Centrifugation and filtration	Purification		Total time
		Binding	Wash and Elution	
AmMag SA	0 min	Binding with cell culture*	31 min	31 min
FPLC	60 min	40 min*12	10 min*12	660 min

* Instead of adding magnetic beads to the cell cultures to bind antibodies overnight, magnetic beads may be added to the samples just prior to purification. To bind antibodies, add magnetic beads to culture and incubate for 60 minutes with shaking. In this case, the additional 60 minutes of the binding step brings the total purification time for 12 samples to 91 minutes.

High yield and purity

Six representative samples were tested for antibody recovery and purity. Both antibody yields and purity were comparable using AmMag SA and the FPLC purification system.





GenScript magnetic beads

- Protein A MagBeads
- Protein G MagBeads
- Protein A/G MagBeads
- Alkaline tolerant AmMag SA magnetic beads
- Ni-charged MagBeads
- GST MagBeads
- Streptavidin MagBeads

Ordering information

For quotes or to request demo for AmMag SA, please email **product@genscript.com**

For additional information, please visit: **https://www.genscript.com/Magnetic_bead_products.html**

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