Protocol for removal of BSA from antibodies

BSA Depletion Magnetic Agarose facilitates fast & easy removal of BSA from antibodies with high antibody recovery. BSA is often added to antibodies for stabilization but may interfere with conjugation methods and other downstream applications.

General Notes

- BSA Depletion Magnetic Agarose is a high-affinity binding resin binding BSA to deplete it from an antibody solution. The antibody of interest will flow through.
- BSA Depletion Magnetic Agarose is compatible with antibodies from a wide range of species such as rabbit, mouse, rat, chicken, sheep etc.
- BSA Depletion Magnetic Agarose is also compatible with typical antibody buffer compounds, including glycerol up to 50%.
- BSA concentrations in antibodies can vary from 0.01% to 1%.
  Our recommendation for usage:

    - Use 150 µl **BSA Depletion Magnetic Agarose** (slurry) for 100 µl of antibody supplemented with ≤ 0.1% BSA.
    - Use 300 µl beads (slurry) for 100 µl antibody solutions with 0.5% BSA.
    - Use 500 µl beads (slurry) for 100 µl antibody solutions with 1% BSA.

    Bead volumes can be scaled up proportionally to the antibody volume.

- Please note: Commercial BSA preparations often contain bovine serum proteins, including bovine immunoglobulins (IgG). As a result, the recovered IgG may appear lower in quantity, when in fact the purification has removed contaminating bovine IgG and yielded a cleaner preparation of the target IgG.

Procedure

Equilibration of beads (for 100 µl antibody volume)

1. Resuspend beads by pipetting up and down or by inverting. Do not vortex.
2. Transfer 200 µl (for BSA concentrations < 0.5%) or 500 µl (for BSA 1%) beads (slurry) to a 1.5 mL tube. Separate beads with a magnet (or centrifuge at 2000x g for 1 min). Discard supernatant.
3. Add 500 µl PBS to the beads and separate beads with a magnet (or centrifuge at 2000x g for 1 min). Discard supernatant.

Depletion of BSA

4. Add your antibody (100 µl) to the equilibrated beads.
5. Incubate for 15 min at room temperature at 1000 rpm in a thermal shaker.
6. Separate beads with a magnet (or centrifuge at 2000x g for 1 min). The supernatant contains your BSA depleted antibody.
7. Optional (may increase antibody yield): Add 100 µl PBS to the beads and Separate beads with a magnet (or centrifuge at 2000x g for 2 min). Combine with supernatant from step 6.

Note: This will decrease the concentration of the antibody.