

Binding Protocol for Streptavidin Coated Magnetic Particles

Absolute Mag[™] Streptavidin Particles offer easy affinity isolation or handling of biotinylated nucleic acids, antibodies, or other biotinylated ligands and targets without columns or centrifugation. Our streptavidin coated magnetic particles are uniform and superparamagnetic particles with a monolayer of recombinant streptavidin covalently coupled to the surface.

Absolute Mag[™] Streptavidin Magnetic Particles are pre-blocked by a layer of BSA with significantly low non-specific binding and high binding capacity. The high-affinity interaction between streptavidin and biotin (Kd=10^-15) is used in a vast number of applications.

Materials required:

- Streptavidin coated magnetic beads (Cat# WHM-X049)
- PBS buffer (10 mM, pH 7.4)
- o Biotin-IgG
- Magnetic separator

Procedure:

- 1. Add 0.2 mL biotin-IgG (0.5 mg/mL) with 1 ml PBS buffer to a 1.7 ml microcentrifuge tube.
- 2. Add 0.2 mL WHM-X049 (1 mg/mL) to the biotin-IgG and vortex the mixture for 1 hour. *Note: Increase the amount of biotin-IgG or decrease the amount of magnetic particles if any precipitation was observed.*
- 3. Put the magnetic particles solution in a magnetic separator. Remove and disregard the supernatant.
- 4. Add 1 mL DI water to resuspend the magnetic particles.
- 5. Repeat step #3 and #4 for three times to remove the free biotin-IgG.
- 6. Resuspend the magnetic particles in desired amount of PBS buffer.