

## Determination of the Binding Capacity of Streptavidin Magnetic Particles

### MATERIALS

1. Streptavidin magnetic particles, 1% w/v
2. Biotin-FA solution

### PROCEDURES

1. Adjust the fluorimeter for excitation and emission respectively.
2. Set 100% emission with the Biotin-FA solution.
3. Add different concentration gradients of streptavidin magnetic particles to six 1.5 ml micro test tubes.
4. Separate the particles magnetically and remove the supernatant.
5. Add 1 ml of Biotin-FA solution to each tube, vortex and rotate at room temperature for one hour.
6. Separate the Streptavidin magnetic particles and read the fluorescence of the supernatant.
7. Fluorescence reduction is proportional to the Biotin-FA bound to the Streptavidin magnetic particles.

### RESULTS

Confirm the binding capacity of Streptavidin magnetic particles. The binding capacity of Streptavidin magnetic particles, 1% w/v, 4.35  $\mu\text{m}$  is approximately 0.29 nmole of Biotin-FA per mg of particles.

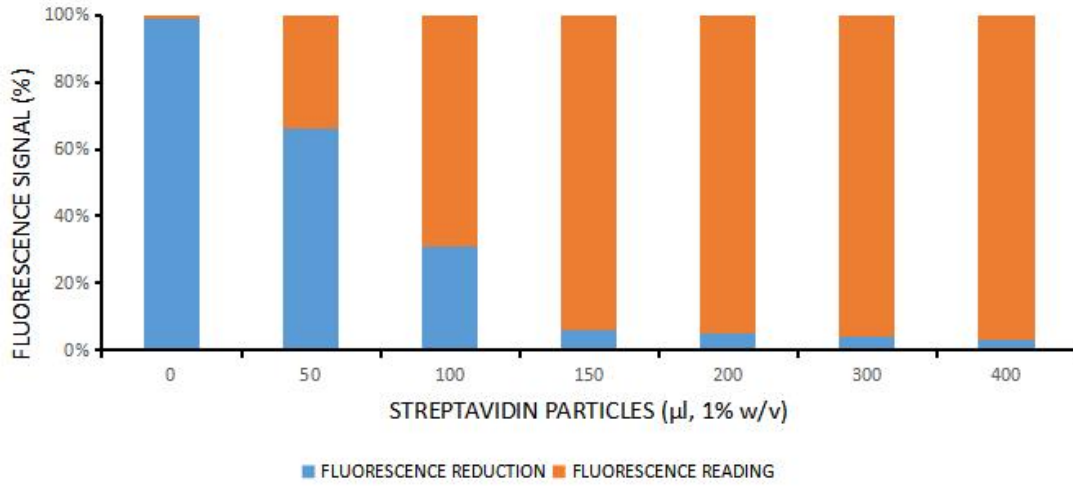


Fig.1 Binding Capacity Determination of Streptavidin Magnetic Particles