

SpheroTECHNICAL NOTES

STN-3 Rev. A 020393

Binding Capacity of Avidin Magnetic Particles:

MATERIALS:

1. Avidin magnetic particles, 1% w/v, Cat. # VM-40-10
Lot No. J01, 4.35 μm
2. Biotin-FA conjugate, Lot No. 021688, 533 nM.in 1% diluent.
(IBS containing 1% normal goat serum and 1% fetal bovine serum)

PROCEDURES:

1. Add 50, 100,150 200, 300 & 400 μl of Avidin magnetic particles to six 12x75 test tubes.
2. Add 1 ml of Biotin-FA conjugate to each tube.
3. Vortex and incubate at ambient temperature for at least 30 minutes with occasional shaking.
4. Adjust the fluorimeter for excitation and emission at 490 and 520 nm respectively.
5. Set 100% emission with the Biotin-FA conjugate.
6. Separate the magnetic particles and read the fluorescence of the supernatant. in each tube. Normalize with the dilution factor in each tube.
7. Fluorescence reduction is proportional to the Biotin-FA bound to the Avidin magnetic particles.

RESULTS:

The binding capacity of Avidin magnetic particles is approximately 0.12 nmole of Biotin-FA per mg of particles as shown in Fig. 1.

Fig. 1

BINDING CAPACITY DETERMINATION

SPHERO Avidin Magnetic Particles, 1% w/v
Cat. No. VM-40-10; Lot No. J01

