

## New England Biolabs Product Specification

*Product Name:* Streptavidin Magnetic Beads  
*Catalog #:* S1420S  
*Concentration:* 4 mg/ml  
*Shelf Life:* 36 months  
*Storage Temp:* 4°C  
*Storage Conditions:* 0.05 % NaN<sub>3</sub>, 0.1 % BSA, 0.05 % Tween®20, 1 X PBS, (pH 7.4 @ 25°C)  
*Specification Version:* PS-S1420S v1.0  
*Effective Date:* 21 Dec 2017

### Assay Name/Specification (minimum release criteria)

**Binding Capacity (Magnetic Beads)** - Streptavidin Magnetic Beads ( 500 µg ) were equilibrated and incubated with 100 µl of 5 µM 5'-Biotin-dT25-FAM-3' for 1 hour at 25°C. Binding capacity was determined to be >500 pmol of oligo per mg of beads.

**Functional Binding Assay (Qualitative)** - Streptavidin Magnetic Beads ( 500 µg ) were equilibrated and incubated with 200 µl of Biotin Mouse Anti-Human IgG then washed and incubated with 500 µl Human Serum IgG for 1 hour at 25°C, then washed, eluted and evaluated by Tris-Glycine gel to confirm low non-specific binding of extract proteins and high isolation of target.

**Non-Specific DNase Activity (16 hour, Buffer)** - A 50 µl reaction in Streptavidin Magnetic Bead Storage Buffer containing 1 µg of PhiX174-HaeIII DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

**RNase Activity (Buffer)** - A 10 µl reaction in Streptavidin Magnetic Bead Storage Buffer containing 40 ng of a 300 base single-stranded RNA is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by fluorescent detection.

\* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Date 21 Dec 2017

Derek Robinson  
Director of Quality Control

