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Date

15 Jun 2018

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## New England Biolabs Product Specification

Product Name: Hydrophilic Streptavidin Magnetic Beads

Catalog #: S1421S
Concentration: 4 mg/ml
Shelf Life: 36 months
Storage Temp: 4°C

Storage Conditions: 0.02 % NaN<sub>3</sub>, 0.1 % BSA, 0.05 % Tween®20, 1 X PBS, (pH 7.4 @, 25°C)

Specification Version: PS-S1421S v1.0
Effective Date: 15 Jun 2018

## Assay Name/Specification (minimum release criteria)

Binding Capacity (Magnetic Beads) - Hydrophilic Streptavidin Magnetic Beads (  $500 \, \mu g$  ) were equilibrated and incubated with  $100 \, \mu l$  of  $5 \, \mu M$  5'-Biotin-dT25-FAM-3' for 1 hour at  $25^{\circ}$ C. Binding capacity was determined to be >400 pmol of oligo per mg of beads.

Functional Binding Assay (Qualitative) - Hydrophilic 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  $\mu$ l reaction in Hydrophilic Streptavidin Magnetic Bead Storage Buffer containing 1  $\mu$ g 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  $\mu$ l reaction in Hydrophilic 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.

Derek Robinson

Director of Quality Control





