

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: 0.05 % NaN₃, 0.1 % BSA, 0.05 % Tween®20, 1 X PBS, (pH 7.4 @ 25°C)
Specification Version: PS-S1421S v3.0
Effective Date: 20 Dec 2023

Assay Name/Specification (minimum release criteria)

Binding Capacity (Magnetic Beads) - Hydrophilic 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 >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 µl reaction in Hydrophilic 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 (Extended Digestion) - A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Hydrophilic Streptavidin Magnetic Beads is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.

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Date 20 Dec 2023

Lauren Brown
Quality Approver

