

## New England Biolabs Certificate of Analysis

**Product Name:** *Hydrophilic Streptavidin Magnetic Beads*  
**Catalog Number:** *S1421S*  
**Concentration:** *4 mg/ml*  
**Packaging Lot Number:** *10241689*  
**Expiration Date:** *11/2026*  
**Storage Temperature:** *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-S1421S v3.0*

Hydrophilic Streptavidin Magnetic Beads Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S1421SVIAL	Hydrophilic Streptavidin Magnetic Beads	10213835	Pass

Assay Name/Specification	Lot # 10241689
<b>Binding Capacity (Magnetic Beads)</b> 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.	<b>Pass</b>
<b>Functional Binding Assay (Qualitative)</b> 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.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> 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.	<b>Pass</b>
<b>RNase Activity (Extended Digestion)</b> 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.	<b>Pass</b>

This product has been tested and shown to be in compliance with all specifications.

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Maxwell Elkus  
Production Scientist  
08 Dec 2023



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Michael Tonello  
Packaging Quality Control Inspector  
14 May 2024