

## New England Biolabs Product Specification

*Product Name:* Protein G Magnetic Beads  
*Catalog #:* S1430S  
*Shelf Life:* 36 months  
*Storage Temp:* 4°C  
*Storage Conditions:* 0.02% NaN<sub>3</sub>, 0.1 % BSA, 0.05 % Tween<sup>®</sup> 20, 1 X PBS, (pH 7.4 @ 25°C)  
*Specification Version:* PS-S1430S v2.0  
*Effective Date:* 25 Oct 2021

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

**Binding Capacity (Magnetic Beads)** - Protein G Magnetic Beads ( 100 µl ) were equilibrated and incubated with 500 µl of Human Serum IgG for 1 hour at 25°C, then washed and the IgG eluted. Binding capacity was determined to be >280 µg of IgG per ml of beads.

**Functional Binding Assay (Qualitative)** - Protein G Magnetic Beads ( 100 µl ) were equilibrated and incubated with 500 µl of 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 Protein G 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 Protein G 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 25 Oct 2021

Derek Robinson  
Director, Quality Control

