

New England Biolabs Certificate of Analysis

Product Name: Recombinant Albumin, Molecular Biology Grade
Catalog Number: B9200S
Concentration: 20 mg/ml
Packaging Lot Number: 10151433
Expiration Date: 07/2024
Storage Temperature: -20°C
Specification Version: PS-B9200S v1.0
Composition (1X): 20 mM Tris-HCl, 100 mM KCl, 0.1 mM EDTA, 50 % Glycerol, (pH 8.0 @ 25°C)

Recombinant Albumin, Molecular Biology Grade Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B9200SVIAL	Recombinant Albumin, Molecular Biology G	10116056	Pass

Assay Name/Specification	Lot # 10151433
<p>qPCR DNA Contamination (E. coli Genomic) A minimum of 20 µg of Recombinant Albumin, Molecular Biology Grade is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome.</p>	Pass
<p>qPCR DNA Contamination (Eukaryotic Genomic) A minimum of 20 µg of Recombinant Albumin, Molecular Biology Grade is screened for the presence of eukaryotic genomic DNA using SYBR® Green qPCR with universal primers for the 18S rRNA locus. Results are quantified using a standard curve generated from purified E. album genomic DNA. The measured level of eukaryotic genomic DNA contamination is ≤ 2.5 pg DNA/µl.</p>	Pass
<p>RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of fluorescein labeled RNA transcript and a minimum of 20 µg of Recombinant Albumin, Molecular Biology Grade 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.</p>	Pass
<p>Protein Concentration (A280) The concentration of Recombinant Albumin, Molecular Biology Grade is 20 mg/ml +/- 5% as determined by UV absorption at 280 nm. Protein concentration is determined by the</p>	Pass

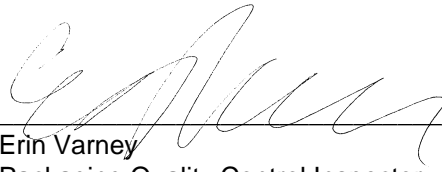
Assay Name/Specification	Lot # 10151433
<p>Pace method using the extinction coefficient of 34,445 and molecular weight of 66,438 daltons for Recombinant Albumin, Molecular Biology Grade (Pace, C.N. et al. (1995) Protein Sci., 4, 2411-2423).</p>	
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 4 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 100 µg of Recombinant Albumin, Molecular Biology Grade incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 4 containing 1 µg of Lambda-HindIII DNA and a minimum of 100 µg of Recombinant Albumin, Molecular Biology Grade incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<p>Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 RF I DNA and a minimum of 20 µg of Recombinant Albumin, Molecular Biology Grade incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p>Single Stranded DNase Activity (FAM-Labeled Oligo) A 50 µl reaction in CutSmart® Buffer containing a 20 nM solution of a fluorescent internal labeled oligonucleotide and a minimum of 100 µg of Recombinant Albumin, Molecular Biology Grade incubated for 16 hours at 37°C yields <5% degradation as determined by capillary electrophoresis.</p>	Pass

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Joe Cummings
Production Scientist
13 May 2022



Erin Varney
Packaging Quality Control Inspector
13 May 2022