

## New England Biolabs Product Specification

*Product Name:* Authenticase™  
*Catalog #:* M0689S/L  
*Concentration:* 1 reaction/μl  
*Shelf Life:* 24 months  
*Storage Temp:* -20°C  
*Storage Conditions:* 500 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, (pH 7.4 @ 25°C)  
*Specification Version:* PS-M0689S/L v1.0  
*Effective Date:* 12 Jul 2023

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

**Functional Testing (Authenticase™)** - A 20 μl reaction in 1X Authenticase™ Reaction Buffer containing 0.33 pmol of 60-mer heteroduplex of A/C, T/G, and 2 bp InDel mismatches, respectively, and a minimum of 1 μl of Authenticase™ is incubated at 42°C. After incubation for 30 minutes, >90% of the substrate DNA was digested 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 Authenticase™ is incubated at 37°C. After incubation for 2 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.

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Date 12 Jul 2023

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Quality Approver

