

New England Biolabs Product Specification

<i>Product Name:</i>	<i>OneTaq[®] 2X Master Mix with Standard Buffer</i>
<i>Catalog #:</i>	<i>M0482S/L</i>
<i>Concentration:</i>	<i>2X</i>
<i>Shelf Life:</i>	<i>24 months</i>
<i>Storage Temp:</i>	<i>-20°C</i>
<i>Composition (1X):</i>	<i>20 mM Tris-HCl (pH 8.9 @ 25°C), 22 mM NH₄Cl, 22 mM KCl, 1.8 mM MgCl₂, 0.2 mM dATP, 0.2 mM dCTP, 0.2 mM dGTP, 0.2 mM dTTP, 5 % Glycerol, 0.06 % IGEPAL[®] CA-630, 0.05 % Tween[®] 20, 25 units/ml OneTaq[®] DNA Polymerase</i>
<i>Specification Version:</i>	<i>PS-M0482S/L v2.0</i>
<i>Effective Date:</i>	<i>12 Feb 2020</i>

Assay Name/Specification (minimum release criteria)

Non-Specific DNase Activity (16 hour, Buffer) - A 50 µl reaction in 1X OneTaq[®] Master Mix with Standard Buffer containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

PCR Amplification (5 kb Lambda, Master Mix) - A 25 µl reaction in 1X OneTaq[®] Master Mix with Standard Buffer and 0.2 µM primers containing 5 ng Lambda DNA for 25 cycles of PCR amplification results in the expected 5 kb product.

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 OneTaq[®] 2X Master Mix with Standard Buffer is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.

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