

## New England Biolabs Product Specification

<i>Product Name:</i>	<i>ET SSB</i>
<i>Catalog #:</i>	<i>M2401S</i>
<i>Concentration:</i>	<i>500 µg/ml</i>
<i>Unit Definition:</i>	<i>N/A</i>
<i>Shelf Life:</i>	<i>24 months</i>
<i>Storage Temp:</i>	<i>-20°C</i>
<i>Storage Conditions:</i>	<i>20 mM Tris-HCl, 200 mM NaCl, 1 mM EDTA, 0.5 mM DTT, 50 % Glycerol, (pH 7.5 @ 25°C)</i>
<i>Specification Version:</i>	<i>PS-M2401S v1.0</i>
<i>Effective Date:</i>	<i>31 Oct 2017</i>

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

**Endonuclease Activity (Nicking)** - A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 5 µg of ET SSB incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.

**Exonuclease Activity (Radioactivity Release)** - A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] *E. coli* DNA and a minimum of 20 µg of ET SSB incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.

**Non-Specific DNase Activity (16 Hour)** - A 50 µl reaction in CutSmart® Buffer containing 1 µg of Lambda DNA and a minimum of 5 µg of ET SSB incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.



Date 31 Oct 2017

Derek Robinson  
Director of Quality Control

