# New England Biolabs
## Product Specification

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

<table>
<thead>
<tr>
<th>Assay Name/Specification</th>
<th>(minimum release criteria)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Endonuclease Activity (Nicking)</strong></td>
<td>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 &lt;20% conversion to the nicked form as determined by agarose gel electrophoresis.</td>
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<tr>
<td><strong>Exonuclease Activity (Radioactivity Release)</strong></td>
<td>A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 20 µg of ET SSB incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</td>
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<tr>
<td><strong>Non-Specific DNase Activity (16 Hour)</strong></td>
<td>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.</td>
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</tbody>
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Derek Robinson  
Director of Quality Control  

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Date 31 Oct 2017