**New England Biolabs**

**Product Specification**

**Product Name:** Casein Kinase I (CK1)

**Catalog #:** P6030S/L

**Concentration:** 1,000,000 units/ml

**Unit Definition:** One unit is defined as the amount of CK1 required to catalyze the transfer of 1 pmol of phosphate to CK1 Phosphopeptide Substrate, KRRRALpSVASLPGL (70 µM), in 1 minute at 30°C in a total reaction volume of 25 µl.

**Shelf Life:** 12 months

**Storage Temp:** -20°C

**Storage Conditions:** 100 mM NaCl, 20 mM Tris-HCl, 2 mM DTT, 1 mM EDTA, 1 mM EGTA, 50 % Glycerol, 0.1 % Triton® X-100, (pH 7.0 @ 25°C)

**Specification Version:** PS-P6030S/L v1.0

**Effective Date:** 26 Oct 2015

<table>
<thead>
<tr>
<th>Assay Name/Specification (minimum release criteria)</th>
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<tbody>
<tr>
<td><strong>Phosphatase Activity (pNPP)</strong> - A 220 µl reaction in NEBuffer for Protein Kinases containing 50 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of 10,000 units Casein Kinase I (CK1) incubated for 2 hours at 30°C yields no detectable phosphatase activity as determined by spectrophotometric analysis.</td>
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<td><strong>Protease Activity (SDS-PAGE)</strong> - A 20 µl reaction in 1X NEBuffer for Protein Kinases containing 24 µg of a standard mixture of proteins and a minimum of 10,000 units of Casein Kinase I (CK1) incubated for 2 hours at 30°C, results in no detectable degradation of the protein mixture as determined by SDS-PAGE with Coomassie Blue detection.</td>
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Derek Robinson  
Director of Quality Control

Date  
26 Oct 2015

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