

## New England Biolabs Product Specification

<i>Product Name:</i>	<i>Casein Kinase I (CK1)</i>
<i>Catalog #:</i>	<i>P6030S/L</i>
<i>Concentration:</i>	<i>1,000,000 units/ml</i>
<i>Unit Definition:</i>	<i>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.</i>
<i>Shelf Life:</i>	<i>12 months</i>
<i>Storage Temp:</i>	<i>-20°C</i>
<i>Storage Conditions:</i>	<i>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)</i>
<i>Specification Version:</i>	<i>PS-P6030S/L v1.0</i>
<i>Effective Date:</i>	<i>26 Oct 2015</i>

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

**Phosphatase Activity (pNPP)** - 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.

**Protease Activity (SDS-PAGE)** - 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.



Date 26 Oct 2015

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Director of Quality Control

