

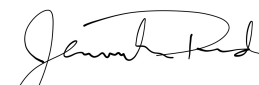
## New England Biolabs Certificate of Analysis

*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.  
*Lot #:* 0121603  
*Assay Date:* 03/2016  
*Expiration Date:* 3/2017  
*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:* 12 Feb 2016

Assay Name/Specification (minimum release criteria)	Lot #0121603
<p><b>Phosphatase Activity (pNPP)</b> - A 220 μl reaction in NEBuffer for Protein Kinases containing 50 mM <i>p</i>-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.</p>	<b>Pass</b>
<p><b>Protease Activity (SDS-PAGE)</b> - 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.</p>	<b>Pass</b>



Authorized by  
Derek Robinson  
12 Feb 2016



Inspected by  
Jeremiah Read  
30 Mar 2016

