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## New England Biolabs Product Specification

Product Name: Casein Kinase II (CK2)

Catalog #: P6010S/L

Concentration: 500,000 units/ml

Unit Definition: One unit is defined as the amount of CK2 required to catalyze the transfer of 1 pmol of phosphate to CK2 Peptide Substrate,

RRRADDSDDDDD (100  $\mu$ M), in 1 minute at 30°C in a total reaction volume of 25  $\mu$ l.

Shelf Life: 12 months
Storage Temp: -80°C

Storage Conditions: 350 mM NaCl, 20 mM Tris-HCl, 2 mM DTT, 1 mM EDTA, 0.1 % TritonX-100., (pH 7.5 @ 25°C)

Specification Version: PS-P6010S/L v1.0
Effective Date: 10 Nov 2015

## Assay Name/Specification (minimum release criteria)

Phosphatase Activity (pNPP) - A 220  $\mu$ l reaction in NEBuffer for Protein Kinases containing 50 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of 5,000 units Casein Kinase II (CK2) 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 5,000 units of Casein Kinase II (CK2) 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.

Derek Robinson

Director of Quality Control





