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## New England Biolabs Product Specification

Catalog #:P6000S/LConcentration:2,500,000 units/ml
2,500,000 units) mi
Unit Definition:One unit is defined as the amount of PKA catalytic subunit required to catalyze the transfer of 1 pmol of phosphate to Kemptide, LRRASLG (100 $\mu$ M) in 1 minute at 30°C in a total reaction volume of 25 $\mu$ L.
Shelf Life: 12 months
Storage Temp: -20°C
Storage Conditions: 50 mM NaCl , 20 mM Tris-HCl , 2 mM DTT , 1 mM EDTA , 50 % Glycerol, (pH 7.5 @ 25°C)
Specification Version: PS-P6000S/L v1.0
Effective Date: 02 Dec 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 20,000 units cAMP-dependent Protein Kinase (PKA), catalytic subunit 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 20,000 units of cAMP-dependent Protein Kinase (PKA), catalytic subunit 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 02 Dec 2015

Derek Robinson Director of Quality Control



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