

## New England Biolabs Certificate of Analysis

**Product Name:** cAMP-dependent Protein Kinase (PKA), catalytic subunit  
**Catalog Number:** P6000S  
**Concentration:** 2,500,000 U/ml  
**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 µM) in 1 minute at 30°C in a total reaction volume of 25 µL.  
**Packaging Lot Number:** 10260433  
**Expiration Date:** 09/2025  
**Storage Temperature:** -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 v2.0

cAMP-dependent Protein Kinase (PKA), catalytic subunit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P6000SVIAL	cAMP-dependent Protein Kinase (PKA), catalytic subunit	10254307	Pass
B6022SVIAL	NEBuffer™ for Protein Kinases (PK)	10217787	Pass

Assay Name/Specification	Lot # 10260433
<b>Phosphatase Activity (pNPP)</b> A 200 µl reaction in 1M Diethanolamine, pH 9.8, 0.5 mM MgCl <sub>2</sub> containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of 20,000 units of cAMP-dependent Protein Kinase (PKA), catalytic subunit incubated for 4 hours at 37°C yields <0.0001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.	Pass
<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 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.	Pass

This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.



Maxwell Elkus  
Production Scientist  
20 Sep 2024



Josh Hersey  
Packaging Quality Control Inspector  
27 Sep 2024