

New England Biolabs Product Specification

Product Name: Quick Dephosphorylation Kit
Catalog #: M0508S/L
Concentration: 100/500 reactions
Unit Definition: N/A.
Shelf Life: 24 months
Storage Temp: -20°C
Storage Conditions: 25 mM Tris-HCl, 1 mM MgCl₂, 0.1 mM ZnCl₂, 50 % Glycerol, (pH 7.5 @ 25°C)
Specification Version: PS-M0508S/L v1.0
Effective Date: 03 Aug 2016

Assay Name/Specification (minimum release criteria)

Endonuclease Activity (Nicking) - A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 µl of Quick CIP incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.

Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³H] *E. coli* DNA and a minimum of 10 µl of Quick CIP incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.

Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in NEBuffer 4 containing 1 µg of PhiX174-HaeIII DNA and a minimum of 10 µl of Quick CIP incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

RNase Activity (Extended Digestion) - A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Quick CIP is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.



Date 03 Aug 2016

Derek Robinson
Director of Quality Control

