

## New England Biolabs Product Specification

*Product Name:* EcoP15I  
*Catalog #:* R0646S/L/V  
*Concentration:* 10,000 units/ml  
*Unit Definition:* One unit is defined as the amount enzyme required to digest 1 µg of pUC19 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.  
*Shelf Life:* 12 months  
*Storage Temp:* -20°C  
*Storage Conditions:* 100 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA  
*Specification Version:* PS-R0646S/L v2.0  
*Effective Date:* 05 Jan 2015

### Assay Name/Specification (minimum release criteria)

**Endonuclease Activity (Nicking)** - A 50 µl reaction in NEBuffer 3.1 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 units of EcoP15I 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 NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] *E. coli* DNA and a minimum of 50 units of EcoP15I 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 3.1 containing 1 µg of pUC19 DNA and a minimum of 50 Units of EcoP15I incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

**Protein Purity Assay (SDS-PAGE)** - EcoP15I is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.

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.



Date 05 Jan 2015

Derek Robinson  
Quality Approver

