New England Biolabs
Product Specification

Product Name: Cre Recombinase
Catalog #: M0298S/L
Concentration: 1,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme necessary to produce maximal site-specific recombination of 0.25 µg pLox2+ control DNA in 30 minutes at 37°C in a total reaction volume of 50 µl. Maximal recombination is determined by agarose gel analysis and by transformation of reactions followed by selection on ampicillin plates.

Shelf Life: 12 months
Storage Temp: -20°C
Storage Conditions: 15 mM Tris-HCl, 250 mM NaCl, 50 % Glycerol, 0.3 mg/ml BSA, (pH 8.0 @ 25°C)

Specification Version: PS-M0298S/L v1.0
Effective Date: 08 Jun 2018

Assay Name/Specification (minimum release criteria)

Non-Specific DNase Activity (16 Hour) - A 50 ul reaction in Cre Recombinase Reaction Buffer containing 1 ug of PhiX174 RF 1 (HaeIII digested) DNA and a minimum of 10 units of Cre Recombinase incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

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

Derek Robinson
Director of Quality Control

Date 08 Jun 2018