

## New England Biolabs Certificate of Analysis

**Product Name:** Cre Recombinase  
**Catalog Number:** M0298M  
**Concentration:** 15,000 U/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.  
**Packaging Lot Number:** 10186545  
**Expiration Date:** 04/2024  
**Storage Temperature:** -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-M0298M v1.0

Cre Recombinase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N0416SVIAL	Control DNA Linearized pLox2+	10185144	Pass
M0298MVIAL	Cre Recombinase	10185143	Pass
B0298SVIAL	Cre Recombinase Reaction Buffer	10142265	Pass

Assay Name/Specification	Lot # 10186545
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in Cre Recombinase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] 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.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> 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 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	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.

*Lauren Higgins*

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Lauren Sears Higgins  
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29 Mar 2023

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
05 Apr 2023