NEW ENGLAND BioLabs Inc.
be INSPIRED drive DISCOVERY stay GENUINE
240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
Fax 978-921-1350
www.neb.com
info@neb.com

New England Biolabs
Certificate of Analysis

Product Name:	*BccI*
Catalog Number:	*R0704L*
Concentration:	*10,000 U/ml*
Unit Definition:	*One unit is defined as the amount of enzyme required to digest 1 µg of pXba DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10106986*
Expiration Date:	*03/2023*
Storage Temperature:	*-20°C*
Storage Conditions:	*50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version:	*PS-R0704S/L v2.0*

BccI Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
R0704LVIAL	BccI	10101361	**Pass**
B6004SVIAL	rCutSmart™ Buffer	10105820	**Pass**

Assay Name/Specification	**Lot # 10106986**
Protein Purity Assay (SDS-PAGE) BccI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	**Pass**
Non-Specific DNase Activity (16 hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pXba DNA and a minimum of 10 Units of BccI incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.	**Pass**
Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of pXba DNA with BccI, ~50% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16ºC. Of these ligated fragments, >95% can be recut with BccI.	**Pass**
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [^{3}H] E. coli DNA and a minimum of 10 units of BccI incubated for 4	**Pass**

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Assay Name/Specification	Lot # 10106986
hours at 37ºC releases <0.3% of the total radioactivity.	

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 for additional information.

Penghua Zhang
Production Scientist
19 Apr 2021

Michael Tonello
Packaging Quality Control Inspector
19 Apr 2021