



## Certificate of Analysis

COA No: CA BEM-0018

Version: 02

# Ranger DNA Polymerase

For Research Use Only

Storage Conditions: -20°C

Lot number: RNG-617104

Expiry date: May 2019

## Quality Control Parameters

Analysis	Specification	Result
Functional	<p>Fragment of size 10Kb is amplified with a dilution series of Ranger DNA Polymerase, using standard conditions and 30 cycles.</p> <p>Fragments of size 10Kb and 23Kb are amplified with a dilution series of human genomic DNA, using standard conditions and 30 cycles.</p> <p>Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).</p>	Passed
DNA contamination	<p>Quantitative PCR analysis with no template. Presence of <i>E. coli</i> and mouse genomic DNA checked. Test sample must amplify in line with a reference sample.</p>	Passed
DNase contamination	<p>Incubation of a 1Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection <math>2.5 \times 10^{-3}</math> U DNase.</p>	Passed

Authorised by Christopher Weatherall

**United Kingdom**  
Headquarters UK

**USA**

**Germany**

**France**

**Australia**

**Singapore**

[info.uk@bioline.com](mailto:info.uk@bioline.com)

Tel: +44 (0)20 8830 5300  
Fax: +44 (0)20 8452 2822

[info.us@bioline.com](mailto:info.us@bioline.com)

Tel: +1 508 880 8990  
Fax: +1 508 880 8993

[info.de@bioline.com](mailto:info.de@bioline.com)

Tel: +49 (0)3371 681 229  
Fax: +49 (0)3371 681 244

[info.fr@bioline.com](mailto:info.fr@bioline.com)

Tel: +33 (0)1 42 56 04 40  
Fax: +33 (0)9 70 06 62 10

[info.aust@bioline.com](mailto:info.aust@bioline.com)

Tel: +61 (0)2 9209 4180  
Fax: +61 (0)2 9209 4763

[info.sg@bioline.com](mailto:info.sg@bioline.com)

Tel: +65 6774 7196  
Fax: +65 6774 6441



## Certificate of Analysis

COA No: CA BB-0043

Version: 02

# RANGER Reaction Buffer

For Research Use Only

Storage Conditions: -20°C

Lot number: RNGB-617104

Expiry date: May 2019

## Quality Control Parameters

Analysis	Specification	Result
Functional	Fragments of sizes 10kb and 23kb were amplified with a dilution series of human genomic DNA, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	Passed
DNA contamination	Quantitative PCR analysis with no template. Presence of <i>E. coli</i> and mouse genomic DNA checked. Test sample must amplify in line with a reference sample.	Passed
DNase contamination	Incubation of a 1kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection $2.5 \times 10^{-3}$ U DNase.	Passed

Authorised by Christopher Weatherall

**United Kingdom**  
Headquarters UK

[info.uk@bioline.com](mailto:info.uk@bioline.com)  
Tel: +44 (0)20 8830 5300  
Fax: +44 (0)20 8452 2822

**USA**

[info.us@bioline.com](mailto:info.us@bioline.com)  
Tel: +1 508 880 8990  
Fax: +1 508 880 8993

**Germany**

[info.de@bioline.com](mailto:info.de@bioline.com)  
Tel: +49 (0)3371 681 229  
Fax: +49 (0)3371 681 244

**France**

[Info.fr@bioline.com](mailto:Info.fr@bioline.com)  
Tel: +33 (0)1 42 56 04 40  
Fax: +33 (0)9 70 06 62 10

**Australia**

[info.aust@bioline.com](mailto:info.aust@bioline.com)  
Tel: +61 (0)2 9209 4180  
Fax: +61 (0)2 9209 4763

**Singapore**

[Info.sg@bioline.com](mailto:Info.sg@bioline.com)  
Tel: +65 6774 7196  
Fax: +65 6774 6441