



## Certificate of Analysis

COA No: CA BEM-0018

Version: 03

# Ranger DNA Polymerase

For Research Use Only

Storage Conditions: -20°C

Lot number: RNG-718107B

Expiry date: August 2020

## 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 Ivan Mijatovic

**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

|  |                                  |                     |
|--|----------------------------------|---------------------|
| <br><small>A Mediatech Life Sciences Company</small> | <h2>Certificate of Analysis</h2> | COA No: CA_XBB-0043 |
|  |                                  | Version: 03         |

|   |                     |              |
|---|---------------------|--------------|
| <h1>RANGER Reaction Buffer</h1><br><p>For Research Use Only</p> | Storage Conditions: | -20°C        |
|   | Lot number:         | RNGB-618107B |
|   | Expiry date:        | August 2020  |

### 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 Ivan Mijatovic



**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