



## Certificate of Analysis

COA No: CA\_XBH-0002

Version: 04

### HyperLadder™ 50bp

For Research Use Only

Storage Conditions: -20°C

Lot number: H2-818104A

Expiry date: May 2020

### Quality Control Parameters

#### Certified Values:

| Number of Bases | Method of Testing | Specification     | Method of Testing   | Results |
|-----------------|-------------------|-------------------|---|---------|
| 50 bp           | Sequencing        | 40 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 100 bp          | Sequencing        | 40 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 200 bp          | Sequencing        | 40 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 300 bp          | Sequencing        | 100 ng/band ± 10% | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 400 bp          | Sequencing        | 30 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 500 bp          | Sequencing        | 30 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 600 bp          | Sequencing        | 30 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 700 bp          | Sequencing        | 30 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 800 bp          | Sequencing        | 30 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 1000 bp         | Sequencing        | 100 ng/band ± 10% | UV absorption spectrum<br>Visual comparison test vs history | Passed  |
| 1200 bp         | Sequencing        | 20 ng/band ± 10%  | UV absorption spectrum<br>Visual comparison test vs history | Passed  |

**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

|  |                                |                     |
|--|--------------------------------|---------------------|
|  | <b>Certificate of Analysis</b> | COA No: CA_XBH-0002 |
|  |                                | Version: 04         |

|         |            |                      |   |        |
|---------|------------|----------------------|---|--------|
| 1400 bp | Sequencing | 20 ng/band $\pm$ 10% | UV absorption spectrum<br>Visual comparison test vs history | Passed |
| 1600 bp | Sequencing | 20 ng/band $\pm$ 10% | UV absorption spectrum<br>Visual comparison test vs history | Passed |
| 1800 bp | Sequencing | 20 ng/band $\pm$ 10% | UV absorption spectrum<br>Visual comparison test vs history | Passed |
| 2000 bp | Sequencing | 50 ng/band $\pm$ 10% | UV absorption spectrum<br>Visual comparison test vs history | Passed |

Note: The values given relate to individual bands. Following the combination of all bands in one solution, the Ladder may be used for approximating the mass of DNA.

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  
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|---|--------------------------------|----------------------------|
| <br><small>A Merck Life Science Company</small> | <b>Certificate of Analysis</b> | <b>COA No: CA XBB-0005</b> |
|   |                                | <b>Version: 03</b>         |

|  |                     |              |
|--|---------------------|--------------|
| <h2>DNA Loading Buffer Blue</h2><br><p>For Research Use Only</p> | Storage Conditions: | -20°C        |
|  | Lot number:         | HLBB-618104B |
|  | Expiry date:        | May 2020     |

|                                   |
|-----------------------------------|
| <b>Quality Control Parameters</b> |
|-----------------------------------|

| Analysis            | Specification   | Result |
|---------------------|---|--------|
| Functional          | Tested on a 1.5% gel with 4 different sized DNA. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).   | 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 |

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**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

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