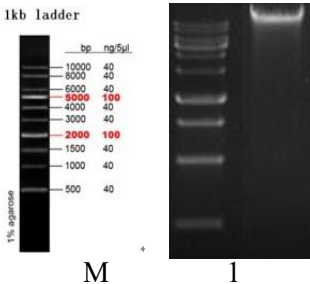


# CERTIFICATE OF ANALYSIS

## General information

|                     |  |
|---------------------|--|
| Name                | MSI-H-U1(100%) Reference Standard (M19-11060_Normal) |
| Catalog No.         | CBP80002-5   |
| Lot No.             | GBD37323565  |
| Format              | Genomic DNA  |
| Buffer              | Tris-EDTA  |
| Storage Conditions  | -20°C  |
| Date of Manufacture | Jul.-06-2021   |
| Expiry              | 36 months from the date of manufacture               |

## Quality Control

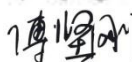
| Test Items          | Standard       | Results   | Passed    |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
|---------------------|----------------|---|-----------|--|--|--------|--------|--------|------|-------|--|-------|--------|--|-------|--------|--|------|--------|--|------|--------|--|--------|--------|--|---|
| Quantity            | 1ug/vial*1vial | 1ug/vial*1vial  | √         |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| Concentration       | Qubit 3.0      | 40 ng/uL±10%  | √         |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| OD260/OD280         | 1.75~1.9       | 1.84  | √         |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| DNA electrophoresis | No Degradation |  <p>           1kb ladder<br/>           bp ng/5ul<br/>           10000 40<br/>           8000 40<br/>           6000 40<br/>           5000 100<br/>           4000 40<br/>           3000 40<br/>           2000 100<br/>           1500 40<br/>           1000 40<br/>           500 40<br/>           1% agarose<br/>           M 1<br/>           M: Marker<br/>           1: MSI-H-U1(100%) Reference Standard (M19-11060_Normal)         </p> | √         |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| MSI/MSS             | PCR            | <table border="1"> <thead> <tr> <th colspan="3">M19-11060</th> </tr> <tr> <th>Marker</th> <th>Size 1</th> <th>Size 2</th> </tr> </thead> <tbody> <tr> <td>NR21</td> <td>131.9</td> <td></td> </tr> <tr> <td>Bat26</td> <td>176.32</td> <td></td> </tr> <tr> <td>Bat25</td> <td>118.87</td> <td></td> </tr> <tr> <td>NR27</td> <td>155.54</td> <td></td> </tr> <tr> <td>NR24</td> <td>131.99</td> <td></td> </tr> <tr> <td>Mono27</td> <td>171.78</td> <td></td> </tr> </tbody> </table>   | M19-11060 |  |  | Marker | Size 1 | Size 2 | NR21 | 131.9 |  | Bat26 | 176.32 |  | Bat25 | 118.87 |  | NR27 | 155.54 |  | NR24 | 131.99 |  | Mono27 | 171.78 |  | √ |
| M19-11060           |                |   |           |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| Marker              | Size 1         | Size 2  |           |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| NR21                | 131.9          |   |           |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| Bat26               | 176.32         |   |           |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| Bat25               | 118.87         |   |           |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| NR27                | 155.54         |   |           |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| NR24                | 131.99         |   |           |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |
| Mono27              | 171.78         |   |           |  |  |        |        |        |      |       |  |       |        |  |       |        |  |      |        |  |      |        |  |        |        |  |   |

### Caution:

For research use only.

If you have any questions about the Certificate of Analysis, please contact us.

Certified by:  Date: \*\*\*\*

 Date: \*\*\*\*