

Version : 01

Update : 08/23/2021

## CERTIFICATE OF ANALYSIS

### Product Information

|              |  |
|--------------|--|
| Product Name | GenCRISPR™ Ultra NLS-Cas9-basic GMP  |
| Cat. No.     | Z03623   |
| Lot No.      | T2109065   |
| Size         | Specified on product label   |
| Formulation  | Supplied as a solution of 25 mM Tris, 300 mM NaCl, 0.1 mM EDTA, 50% Glycerol, pH 8.0.    |
| Storage      | This product remains stable up to 12 months at -20°C. Avoid repeated freeze-thaw cycles. |
| Expiry Date  | 29 Sep, 2022   |

### Quality Control

| Test Items        | Specifications                                | Results    |
|-------------------|---|------------|
| Appearance        | Clear, Colorless, Liquid                      | Passed     |
| Bioactivity       | ≥ 90% as analyzed by <i>in vitro</i> assay    | Passed     |
| Concentration     | 10 mg/ml ± 1 mg/ml as analyzed by A280        | 10.4 mg/ml |
| Purity            | ≥ 95% as analyzed by SDS-PAGE                 | Passed     |
|                   | ≥ 95% as analyzed by SEC-HPLC                 | Passed     |
| Endotoxin Level   | ≤ 10 EU/mg as analyzed by gel clotting method | Passed     |
| Residual RNase    | ≤ 1 ng/mg by Ambion RNaseAlert                | Passed     |
| Residual DNase    | ≤ 10 ng/mg by Ambion DNaseAlert               | Passed     |
| Host Cell Protein | ≤ 10 ng/mg by ELISA                           | Passed     |
| Host Cell DNA     | ≤ 1 ng/mg by qPCR                             | Passed     |
| Bioburden         | < 1 CFU/ml                                    | Passed     |

Date: 12/02/2021

Approved by: *Dandan Yao*

Quality Department