

| CERTIFICATE OF ANALYSIS   |                                      |               |                |
|---|--------------------------------------|---------------|----------------|
| Gene Name   | pHANNIBAL vector<br>(Cat. # V010843) | Order No.     | G0233701-1     |
| Lot No.   | E33040 Strain JN                     |               | JM108          |
| Quantity  | 100ug                                | Quality grade | Research Grade |
| QC Results  |                                      |               |                |
| Test Items  | Specifications                       |               | Results        |
| Appearance  | Clear, no visible particles          | Pass          |                |
| Concentration   | On request, default lug/ul           | Pass          |                |
| A260/280  | 1.8 - 2.0                            | Pass          |                |
| A260/230  | >2.0                                 | Pass          |                |
| Supercoiled content   | No request                           | N/A           |                |
| Residual RNA  | Not visible upon electroph           | Pass          |                |
| Genomic DNA   | Not visible upon electroph           | Pass          |                |
| Restriction Analysis  | Conforms to reference                | Pass          |                |
| Bioburden assay   | No growth on agar plate a            | N/A           |                |
| <b>Endotoxin Test</b>   | Verified, (Endo-Free Prep            | N/A           |                |
| Label   | Correct and white                    | Pass          |                |
| Sequencing  | Correct                              | Pass          |                |
| Comments  | -                                    |               |                |
| Restriction Digestion Map  1 2 M  |                                      |               |                |
| Lane1:Plasmid DNA  Lane2:Plasmid digested by XhoI-XbaI  Lane M: DNA Marker  Lane M: DNA Marker  2500  1000  750  5000  2500  2500  2500  2500  2500  2500  2500  2500  2500  2500  2500  2500 |                                      |               |                |

**Certified by: Chou Fang** 

Date: <u>June/07/2022</u>