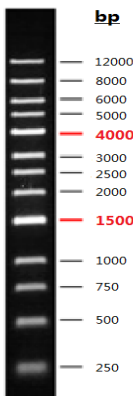


| Certificate of Analysis                                                             |                                                                                                                                                 |             |            |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------|
| Vector Name                                                                         | pCVD442                                                                                                                                         | Catalog No. | V005971    |
| Project/Lot No.                                                                     | G0384706-1/ D29381                                                                                                                              | Strain      | DH5α-λpir  |
| Quantity                                                                            | 100ug                                                                                                                                           | Resistance  | Ampicillin |
| QC Results                                                                          |                                                                                                                                                 |             |            |
| Test Items                                                                          | Specifications                                                                                                                                  | Results     |            |
| Appearance                                                                          | Clear, no visible particles                                                                                                                     | Pass        |            |
| Concentration                                                                       | On request, default                                                                                                                             | Pass        |            |
| A260/280                                                                            | 1.8 - 2.0                                                                                                                                       | Pass        |            |
| A260/230                                                                            | >2.0                                                                                                                                            | Pass        |            |
| Supercoiled content                                                                 | No request                                                                                                                                      | N/A         |            |
| Residual RNA                                                                        | Not visible upon electrophoresis                                                                                                                | Pass        |            |
| Genomic DNA                                                                         | Not visible upon electrophoresis                                                                                                                | Pass        |            |
| Restriction Analysis                                                                | Conforms to reference                                                                                                                           | Pass        |            |
| Bioburden assay                                                                     | No growth on agar plate after 24 hours                                                                                                          | N/A         |            |
| Endotoxin Test                                                                      | Verified, (Endo-Free Preps Only)                                                                                                                | N/A         |            |
| Label                                                                               | Correct and white                                                                                                                               | Pass        |            |
| Sequencing                                                                          | Correct                                                                                                                                         | Pass        |            |
| Comments                                                                            | -                                                                                                                                               | -           |            |
| Restriction Digestion Map                                                           |                                                                                                                                                 |             |            |
|  | 1                                                                                                                                               | 2           | M          |
|                                                                                     | <p><b>Lane 1:</b> Plasmid DNA</p> <p><b>Lane 2:</b> Plasmid digested by MluI-SacI (2425/3920 bp in theory)</p> <p><b>Lane M:</b> DNA Marker</p> |             |            |

Certified by: Chou Fang  
Date: Nov/17/2025  
Valid until: Nov/17/2028

