## Virus Packaging Plasmids

VectorBuilder offers GMP-like and GMP-grade lentivirus and AAV packaging plasmids for the manufacturing of pre-clinical and clinical viral vectors for gene and cell therapies. Produced in our state-of-the-art facilities, each plasmid has been optimized to produce high titers of virus and has undergone thorough quality control.

## **Highlights**

- Optimized and validated for high virus yield
- Off-the-shelf plasmids available for immediate use
- Plasmids produced under animal-free and antibiotic-free conditions
- Royalty free
- DMFs available simplifying FDA IND application
- Kan resistance



VB-VSV-G VB-Rev VB-Gag/Pol



VB-AAV-Helper VB-AAV2-Rep/Cap VB-AAV9-Rep/Cap

| QC                     | Method                                   | GMP-like                                  | GMP-grade                                 |
|------------------------|--|---|---|
| Plasmid concentration  | UV spectrophotometry                     | ≥500 ug/ml                                | ≥500 ug/ml                                |
| Restriction digestion  | Agarose gel electrophoresis              | Identical to expected restriction pattern | Identical to expected restriction pattern |
| Sanger sequencing      | Sanger sequencing of the entire plasmid  | Identical to reference sequence           | Identical to reference sequence           |
| A260/A280              | UV spectrophotometry                     | 1.80-2.00                                 | 1.80-2.00                                 |
| ccc plasmid DNA ratio  | EtBr stained agarose gel electrophoresis | ≥80%                                      | ≥80%                                      |
| Residual protein       | BCA or equivalent                        | ≤2.00%                                    | ≤2.00%                                    |
| Residual RNA           | Fluorescence analysis or equivalent      | ≤5.00%                                    | ≤5.00%                                    |
| Residual host cell DNA | Quantitative PCR or equivalent           | Report result                             | ≤5.00%                                    |
| Endotoxin              | Kinetic chromogenic assay                | ≤50 EU/ml                                 | ≤10 EU/ml                                 |
| Sterility              | Direct inoculation                       | No growth                                 | No growth                                 |