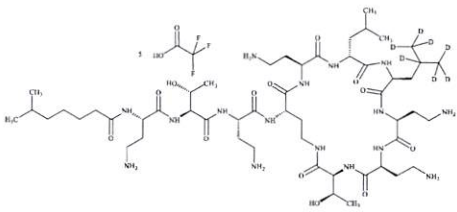


# Certificate of Analysis


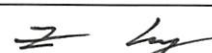
Certificate No.: 20260527004

Date: May 27, 2026

Retest date: May 12, 2029

|                              |   |  |
|------------------------------|---|--|
| <b>Compound Name:</b>        | <b>Colistin B-d<sub>7</sub> Pentatrifluoroacetate (Polymyxin E2-d<sub>7</sub> Pentatrifluoroacetate)</b>  |  |
| <b>Synonyms:</b>             | N-((S)-4-amino-1-(((2S,3R)-1-(((S)-4-amino-1-oxo-1-(((3S,6S,9S,12S,15R,18S,21S)-6,9,18-tris(2-aminoethyl)-3-((R)-1-hydroxyethyl)-15-isobutyl-12-(2-(methyl-d <sub>3</sub> )propyl-2,3,3,3-d <sub>4</sub> )-2,5,8,11,14,17,20-heptaaxo-1,4,7,10,13,16,19-heptaazacyclotricosan-21-yl)amino)butan-2-yl)amino)-3-hydroxy-1-oxobutan-2-yl)amino)-1-oxobutan-2-yl)-6-methylheptanamide, 2,2,2-trifluoroacetic acid (1:5) |  |
| <b>TLC Catalogue Number:</b> | PC-321010   |  |
| <b>CAS Number:</b>           | N/A   |  |
| <b>Alternate CAS Number:</b> | 7239-48-7<br>(non-labelled, free base)  |  |
| <b>Molecular Weight:</b>     | 1162.50 5*114.02  |  |
| <b>Molecular Formula:</b>    | C <sub>52</sub> H <sub>91</sub> D <sub>7</sub> N <sub>16</sub> O <sub>13</sub> . 5 C <sub>2</sub> HF <sub>3</sub> O <sub>2</sub>  |  |
| <b>Source:</b>               | TLC Pharmaceutical Standards  |  |
| <b>Source Lot No.:</b>       | 7444-024A3  |  |
| <b>Storage Conditions:</b>   | Store at 2-8 °C   |  |
| <b>Solubility:</b>           | Methanol, DMSO, Water   |  |

| Test Description               | Specifications                                    | Results         |
|--------------------------------|---|-----------------|
| <b>Visual Description</b>      | White to off-white solid                          | <b>Conforms</b> |
| <b>Identification</b>          |   |                 |
| IR                             | Conforms to structure                             | <b>Conforms</b> |
| MS                             | Conforms to structure                             | <b>Conforms</b> |
| <sup>1</sup> H NMR             | Conforms to structure                             | <b>Conforms</b> |
| <sup>19</sup> F NMR            | Conforms to structure                             | <b>Conforms</b> |
| <b>Purity (HPLC)</b>           | Not less than 95.0%                               | <b>96.1%</b>    |
| <b>Impurity (HPLC)</b>         | RT 12.05, 1.11%; RT 13.92, 1.88%; RT 14.31, 0.93% |                 |
| <b>Isotopic Enrichment</b>     | Not less than 98.0%                               | <b>99.8%</b>    |
| <b>Water Content (KF)</b>      | N/A   | <b>1.7%</b>     |
| <b>Residual Solvents (NMR)</b> | No residual solvent                               |                 |
| <b>Assay (%)</b>               | Not less than 90.0%                               | <b>94.5%</b>    |
| <b>Recommendation:</b>         | <b>Release.</b>                                   |                 |

| Name                      | Department        | Signature  | Date       |
|---------------------------|-------------------|--|------------|
| Reviewed and approved by: | Quality Control   |  | 05/27/2026 |
| Approved by:              | Quality Assurance |  | 05/27/2026 |

**Attachments:** Peak Attribution Table, Assay Calculation, HPLC, IR, MS and NMR spectra.