

Certificate of Analysis

Material Description: GMP grade
 Material Number: XXXXXXXXXXXXX
 Packed Column Volume: 0.4 L
 Bed Height: 19.2cm
 Column Diameter: 5 cm
 Column Batch: D17022301
 Resin Lot: 082070CO
 Manufacture Date: 17-Feb-2023
 Expiration Date: N/A

| Criteria | Specification | Results |
|---|---------------|---------|
| Packed Column Column efficiency, plates/meter | ≥ 4000 | 4140 |
| Column asymmetry | 0.7-1.4 | 1.2 |
| Pressure, bar at 180 cm/hr flow rate | ≤ 5 | 2.6 |
| Bed Height | 20cm (+/-1) | 19.2 |
| Microbial bioburden, CFU/ml | < 10 | 1 |
| Endotoxin level, EU/ml | < 0.25 | < 0.25 |

Efficiency Test Conditions

Mobile phase buffer: 0.15 M sodium chloride
 Tracer: 1 M sodium chloride
 Flow velocity: 100 cm/hr
 Volume of tracer: 4 ml

Manufactured in UK under quality system management.



Signature

27-Feb-23 / 14:30
 Date/Time

Oliver Watson
 Print name

Production Scientist
 Title