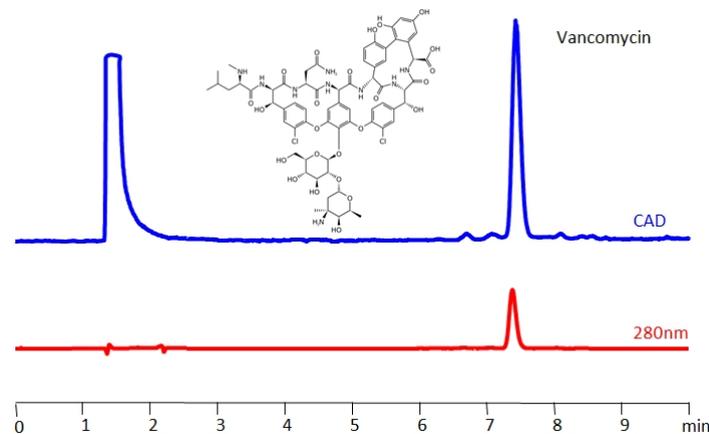


HPLC Determination of Vancomycin on Newcrom R1 Column



| | |
|----------------------------|---------------------------------|
| Column: | Newcrom R1 |
| Column size: | 4.6 × 150 mm, 5 µm |
| Column part number: | NR1-46.150.0510 |
| Mobile phase: | MeCN – 5 - 20%, 10 min |
| Buffer: | Ammonium Formate – 10 mM pH 3.0 |
| Flow rate: | 1.0 mL/min |
| Detection: | CAD, UV 280 nm |

High Performance Liquid Chromatography (HPLC) Method for Analysis of Vancomycin.

Vancomycin is a glycopeptide antibiotic with the chemical formula $C_{66}H_{75}Cl_2N_9O_{24}$. It is used to treat severe but susceptible bacterial infections. Vancomycin is a branched tricyclic glycosylated nonribosomal peptide often reserved as the “drug of last resort”, used only after treatment with other antibiotics has failed. The WHO classifies it as a critically important human medicine, even including it on the List of Essential Medicines.

Vancomycin can be retained in HPLC on Newcrom R1 reverse-phase column with the simple isocratic mobile phase consisting of acetonitrile (MeCN), water and ammonium formate as a buffer. and detected by UV, ELSD, CAD or LC/MS.

Method Parameters

| | |
|---------------------|---|
| Column | Newcrom R1, 4.6 x 150 mm, 5 µm, 100 Å, dual ended |
| Mobile Phase | Gradient MeCN – 5-20%, 10 min |
| Buffer | Ammonium Formate pH 3.0 – 10 mM |
| Flow Rate | 1.0 mL/min |
| Detection | 280 nm, CAD |

Quelle: <https://sielc.com/hplc-determination-of-vancomycin>