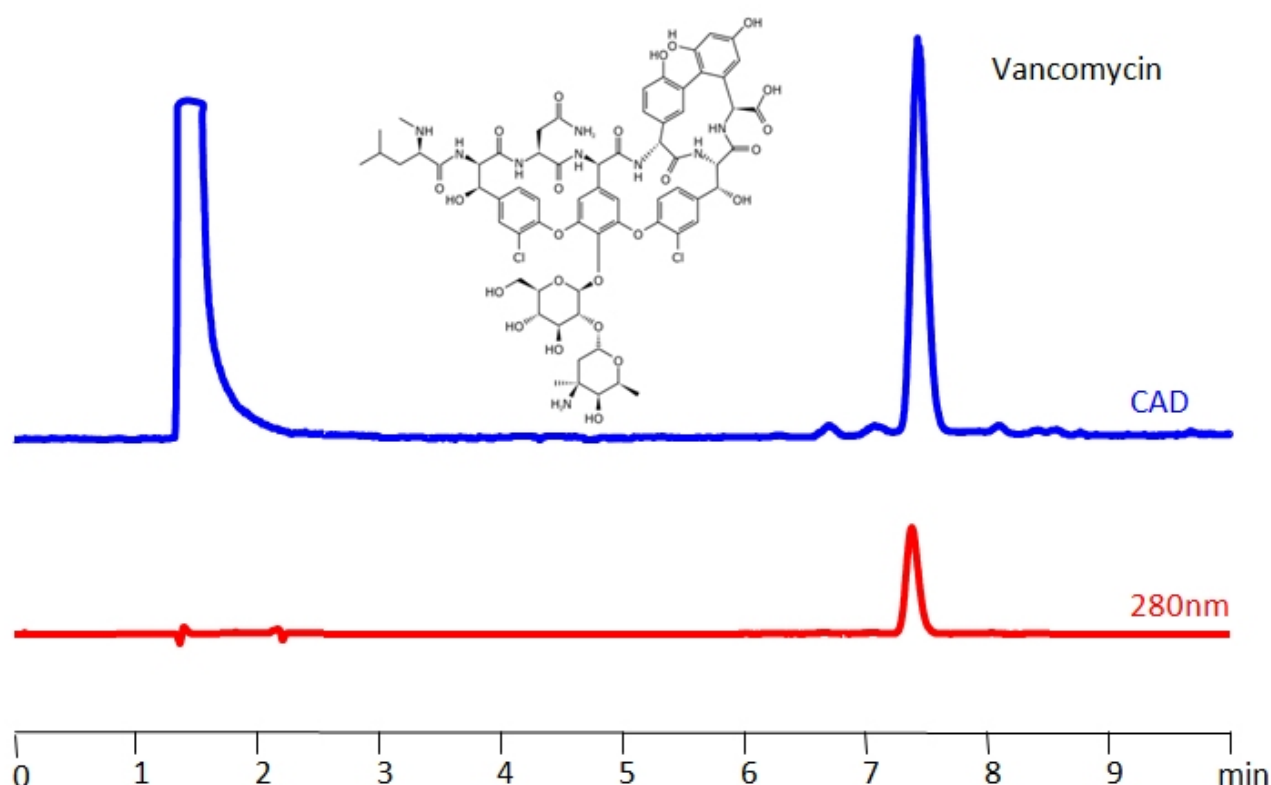


HPLC Determination of Vancomycin on Newcrom R1 Column

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

Chromatogram



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

Description

· 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

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
Class of Compounds	Drug, Antibiotic
Analyzing Compounds	Vancomycin hydrochloride

HPLC Column Used

Newcrom R1, 4.6 x 150 mm, 5 µm, 100 A, dual ended

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)