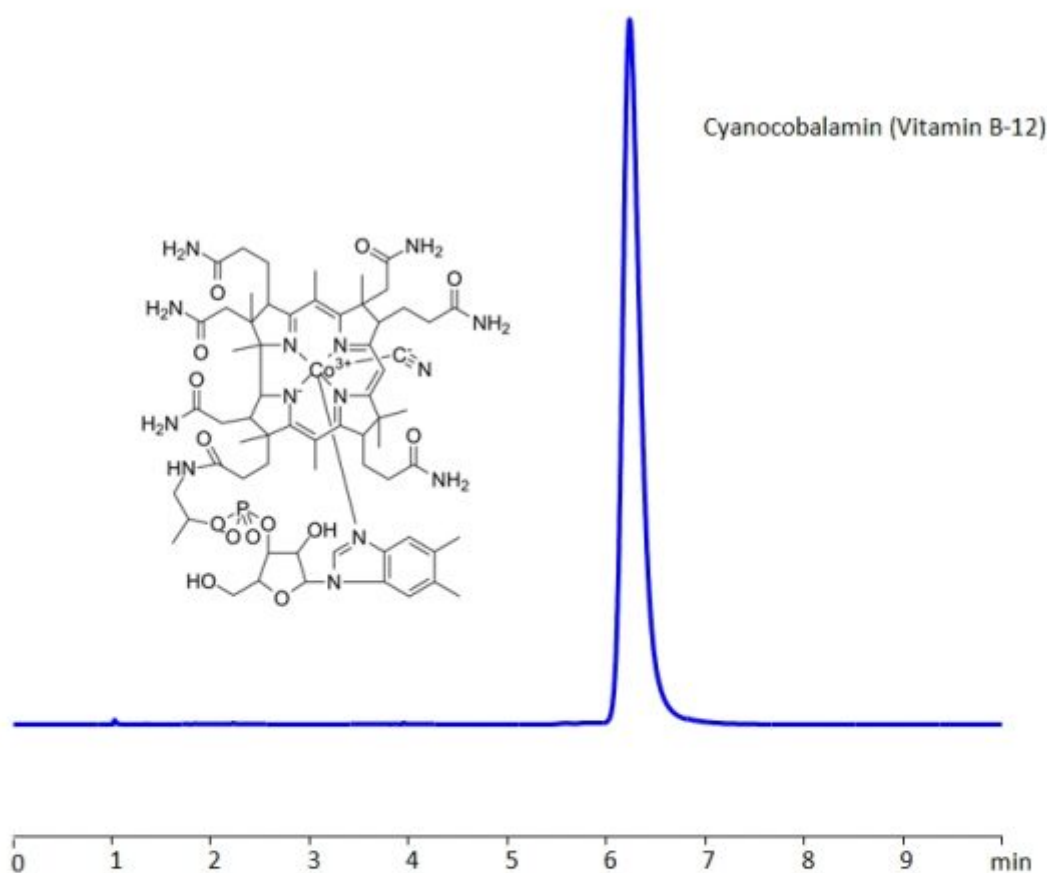


HPLC Determination of Cyanocobalamin (Vitamin B-12) on PEI Column

<https://sielc.com/hplc-determination-of-cyanocobalamin-vitamin-b-12-on-pei-column>

Chromatogram



Column:	PEI
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	Gradient MeCN/MeOH – 70/30% – 20/80%, 10 min
Buffer:	H3PO4 – 0.4 %
Flow rate:	1 mL/min
Detection:	360 nm

Description

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

Vitamin B12 is a water-soluble vitamin that is naturally present in some foods and available as a dietary supplement and as prescription medication. Vitamin B12 exists in several forms and contains the mineral cobalt, so compounds with vitamin B12 activity are collectively called “cobalamins”. It plays an essential role in the production of the red blood cells and DNA, as well as in the proper functioning of the nervous system. Vitamin B12 can be retained and UV detected at 360nm.Using the PEI column and a mobile phase gradient of organic modifier and phosphoric acid (H3PO4) as buffer.

Method Parameters

Mobile Phase

MeCN/MeOH

Buffer	H3PO4 – 0.4%
Flow Rate	1.0 ml/min
Detection	UV 360 nm
Class of Compounds	Vitamin, Drug
Analyzing Compounds	Cyanocobalamin

HPLC Column Used

PEI

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