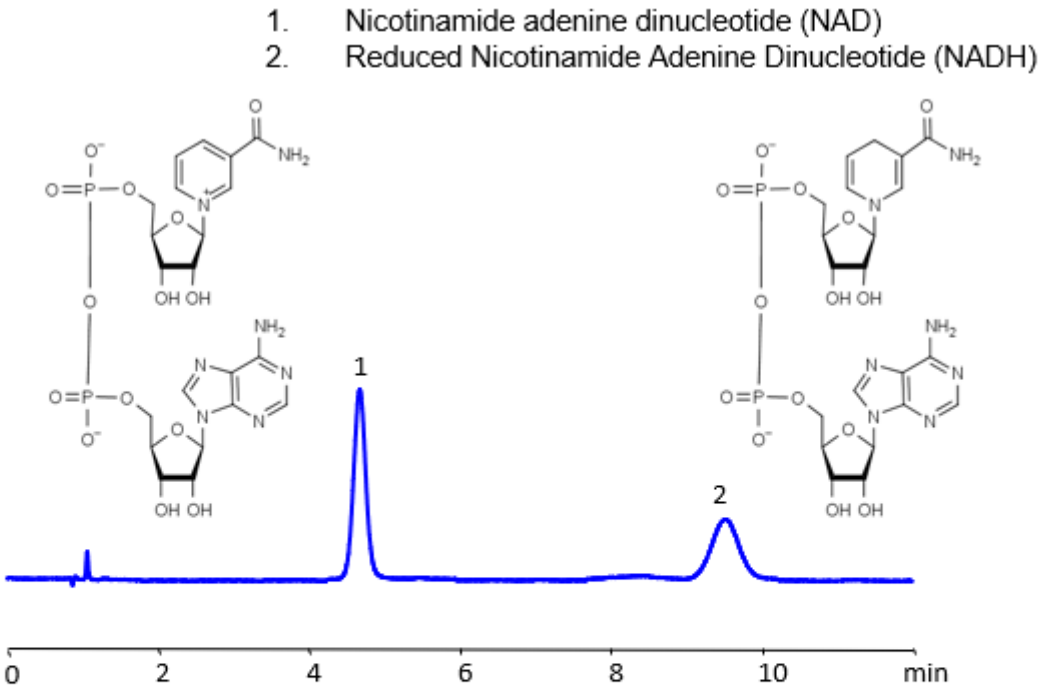
HPLC Separation of NAD and NADH on PEI Column

https://sielc.com/hplc-separation-of-nad-and-nadh-on-pei-column

Chromatogram



Column:	PEI
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	MeCN/H2O - 70/30%
Buffer:	Ammonium Acetate pH 6.8 - 60 mM
Flow rate:	2.0 mL/min
UV detection:	260 nm

Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of SNAD and NADH

Nicotinamide adenine dinucleotide (NAD), is a coenzyme found in every single living cell. NAD can exist in two forms: NAD+ and NADH. The conversion of NAD from its oxidized form (NAD+) to its reduced form (NADH), and back, provides the cell with a mechanism for accepting and donating electrons.

NAD and NADH can be retained, separated and UV detected at 260 nm using the PEI column with a simple MS-compatible mobile phase of acetonitrile (ACN) and water with Ammonium Acetate (AmAc) buffer and detected by UV, ELSD, CAD or LC/MS.

Method Parameters

Mobile Phase	MeCN/H2O
Buffer	Ammonium Acetate pH 6.8 – 60 mM
Flow Rate	2.0 ml/min

Detection	UV 260 nm
Class of Compounds	Drug
Analyzing Compounds	Nicotinamide Adenine Dinucleotide (NAD),Nicotinamide Adenine Dinucleotide (reduced) (NADH)

HPLC Column Used

PEI, 4.6×150 mm, 5 µm, 100A