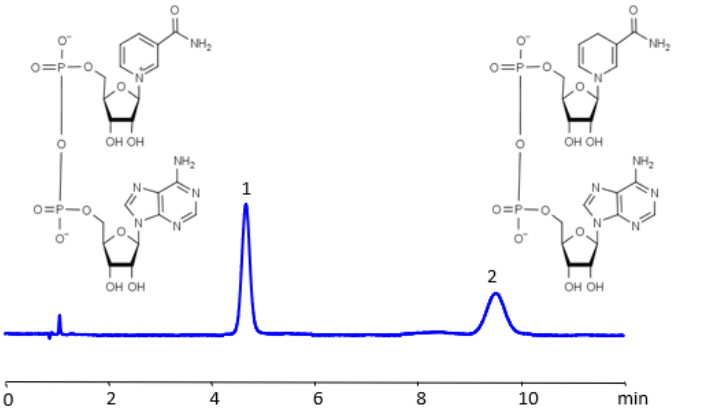
HPLC Separation of NAD and NADH on PEI Column

1. Nicotinamide adenine dinucleotide (NAD)
2. Reduced Nicotinamide Adenine Dinucleotide (NADH)



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

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.

SIELC Technologies offers custom phases for customers who require specific separations not achievable with commercially available HPLC phases. Considering the vast array of compounds and mixtures requiring analysis, tailored LC phases can significantly enhance separation results for unique and challenging applications. To learn more about our special custom LC phases designed for your specific separation needs, please contact SIELC Technologies at research@sielc.com . Our team of experts is ready to guide you through the process and create a custom solution that addresses your particular chromatographic challenges.

Method Parameters

Column	PEI , 4.6×150 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O
Buffer	Ammonium Acetate pH 6.8 – 60 mM
Flow Rate	2.0 mL/min
Detection	UV 260 nm

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