Taylor & Francis Online

Home ▶ All Journals ▶ Physical Sciences ▶ Nucleosides, Nucleotides & Nucleic Acids ▶ List of Issues ▶ Volume 25, Issue 9-11 ▶ Liquid Chromatographic/Mass Spectrometri ....

Nucleosides, Nucleotides & Nucleic Acids ›

Volume 25, 2006 - Issue 9-11

256 Views | 31 CrossRef citations to date | 0 Altmetric

Original Articles

Liquid Chromatographic/Mass Spectrometric Procedure for Measurement of NAD Catabolites in Human and Rat Plasma and Urine

E. M. Slominska, P. Adamski, M. Lipinski, J. Swierczynski & R. T. Smolenski

Pages 1245-1249 | Published online: 22 Nov 2006

Cite this article https://doi.org/10.1080/15257770600894725

Sample our Physical Sciences Journals

>> Sign in here to start your access to the latest two volumes for 14 days

Full Article Figures & data References Citations Metrics

Reprints & Permissions Read this article Share

Abstract

Monitoring level of the metabolites of the coenzyme NAD such as nicotinamide and its oxidized and methylated derivatives is important due to therapeutic applications of these compounds and monitoring of oxidative stress. We evaluated feasibility of using HPLC with electrospray ion-trap mass detection for single run separation and quantitation of all the NAD metabolites. We achieved good separation and retention of all the metabolites of interest using reversed-phase with ion-pairing. Single ion monitoring or tandem MS were used for detection and quantitation of the specific compounds with good linearity. The method was able to detect all the physiological

metabolites in plasma samples of rats and humans or in urine. However, full validation is necessary before this method could be routinely applied.

Keywords:

Nicotinamide | N-Methylnicotinamide | Poly(ADP-ribose) polymerase (PARP) | Liquid chromatography/mass spectrometry

Acknowledgments

This study has been supported by the Ministry of Science and Information Society Technologies of Poland (3 PO5B 118 25 and PBZ-KBN-101/T09/2003/17).

Related research

People also read | Recommended articles | Cited by 31

Information for

Authors

R&D professionals

Editors

Librarians

Societies

Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Help and information

Help and contact

Newsroom

All journals

Books

Keep up to date

Register to receive personalised research and resources by email

Sign me up

Copyright © 2026 Informa UK Limited Privacy policy

Cookies Terms & conditions Accessibility

Taylor and Francis Group

Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG