Determination of mycophenolic acid in meat products using mixed mode reversed phase-anion exchange clean-up and liquid chromatography-high-resolution mass spectrometry

A method for determination of mycophenolic acid (MPA) in dry-cured ham, fermented sausage and liver pate is described. MPA was extracted from meat with bicarbonate-acetonitrile, further cleaned-up by mixed mode reversed phase-anion exchange and detected using a LC-MS system with electrospray ionisation-time-of-flight detection. The limit of detection was 4 μg/kg in sausage and 6 μg/kg in ham and pate. The method was successfully used for quantification of MPA in dry-cured ham and liver pate artificially inoculated with Penicillium brevicompactum. Levels ranged from 190 μg/kg in centre to 11 mg/kg in surface of ham and from 150 μg/kg in bottom to 14 mg/kg in surface of pate. (C) 2008 Elsevier B.V. All rights reserved.

General information
State: Published
Organisations: Center for Microbial Biotechnology, Department of Systems Biology, Institute for Product Development, Danish Meat Research Institute
Authors: Sørensen, L. M. (Intern), Nielsen, K. F. (Intern), Jacobsen, T. (Ekstern), Koch, A. G. (Ekstern), Nielsen, P. V. (Intern), Frisvad, J. C. (Intern)
Pages: 103-108
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Chromatography A
Volume: 1205
Issue number: 1-2
ISSN (Print): 0021-9673
Ratings:
- BFI (2017): BFI-level 1
- Web of Science (2017): Indexed Yes
- BFI (2016): BFI-level 1
- Scopus rating (2016): SJR 1.462 SNIP 1.295 CiteScore 3.97
- BFI (2015): BFI-level 1
- Scopus rating (2015): SJR 1.713 SNIP 1.395 CiteScore 4.03
- Web of Science (2015): Indexed yes
- BFI (2014): BFI-level 1
- Scopus rating (2014): SJR 1.825 SNIP 1.509 CiteScore 4.28
- Web of Science (2014): Indexed yes
- BFI (2013): BFI-level 1
- Scopus rating (2013): SJR 2.017 SNIP 1.616 CiteScore 4.6
- ISI indexed (2013): ISI indexed yes
- Web of Science (2013): Indexed yes
- BFI (2012): BFI-level 1
- Scopus rating (2012): SJR 2.31 SNIP 1.703 CiteScore 4.6
- ISI indexed (2012): ISI indexed yes
- Web of Science (2012): Indexed yes
- BFI (2011): BFI-level 1
- Scopus rating (2011): SJR 2.433 SNIP 1.663 CiteScore 4.47
- ISI indexed (2011): ISI indexed yes
- Web of Science (2011): Indexed yes
- BFI (2010): BFI-level 1
- Scopus rating (2010): SJR 2.207 SNIP 1.566
- Web of Science (2010): Indexed yes
- BFI (2009): BFI-level 1
- Scopus rating (2009): SJR 2.136 SNIP 1.571
- Web of Science (2009): Indexed yes
- BFI (2008): BFI-level 1