# Accepted Manuscript

Title: Comparison of amino acid derivatization reagents for liquid chromatography atmospheric pressure chemical ionization mass spectrometric analysis of seven amino acids in tea extract

Authors: Maarja-Liisa Oldekop, Koit Herodes, Riin Rebane

PII: S1387-3806(17)30125-2

DOI: http://dx.doi.org/doi:10.1016/j.ijms.2017.07.004

Reference: MASPEC 15826

To appear in: International Journal of Mass Spectrometry

Received date: 15-3-2017 Revised date: 3-7-2017 Accepted date: 6-7-2017

Please cite this article as: Maarja-Liisa Oldekop, Koit Herodes, Riin Rebane, Comparison of amino acid derivatization reagents for liquid chromatography atmospheric pressure chemical ionization mass spectrometric analysis of seven amino acids in tea extract, International Journal of Mass Spectrometryhttp://dx.doi.org/10.1016/j.ijms.2017.07.004

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# ACCEPTED MANUSCRIPT

#### **Title**

Comparison of amino acid derivatization reagents for liquid chromatography atmospheric pressure chemical ionization mass spectrometric analysis of seven amino acids in tea extract

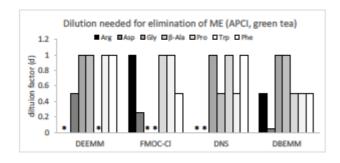
#### **CO-AUTHORS:**

Koit Herodes <sup>a</sup>, koit.herodes@ut.ee Riin Rebane <sup>a</sup>, riin.rebane@ut.ee

#### **CORRESPONDING AUTHOR:**

Maarja-Liisa Oldekop a, maarja-liisa.oldekop@ut.ee, tel: +372 56956431

## Graphical abstract



# Highlights

- Applicability of five derivatization reagents for LC-APCI-MS analysis was tested
- Performance of five derivatization reagents was compared using ESI and APCI LC-MS.
- APCI analysis of green tea proved to be less affected by matrix effects than ESI.
- DEEMM and DNS analyses were less affected by matrix effect than DBEMM and FMOC-Cl.
- APCI and ESI analysis of 7 amino acids in green tea were in very good agreement.

### **Abstract**

The applicability of five amino acid derivatization reagents was tested for liquid chromatography atmospheric pressure chemical ionization mass spectrometry (LC-

<sup>&</sup>lt;sup>a</sup> University of Tartu, Ravila 14a, 50411, Tartu, ESTONIA

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