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ONLINE ISSN : 1880-1404

PRINT ISSN : 0916-717X

Biomedical Research on Trace Elements

Vol. 15 (2004) , No. 3 265-267

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Determination of trace boron in human urine samples by ICP-AES using a solid sampling technique subsequent to concentration by a tailor-made boron-selective adsorbent

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(Accepted: August 16, 2004)

Abstract:

A simple method for preconcentration and determination of trace boron has been developed by the conversion of common anion-exchange resins with a chelating agent, beryllon-II, and the proposed method has been successfully applied to the determination of boron in human urine samples. Beryllon-II-immobilized resin is useful for selective collection of boron in neutral pH region. The concentration of collected boron is determined by introducing the boron-sorbed resin as water-resin suspension into inductively coupled plasma-atomic emission spectroscopy(ICP-AES) apparatus without stripping procedure.

Key words: [boron](#), [human urine](#), [ICP-AES](#), [boron-selective adsorbent](#), [solid sampling technique](#)

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To cite this article:

Hiroyuki Aoki and Masahiko Chikuma, "Determination of trace boron in human urine samples

by ICP-AES using a solid sampling technique subsequent to concentration by a tailor-made boron-selective adsorbent”, Biomedical Research on Trace Elements, Vol. **15**, pp.265-267 (2004) .

JOI JST.JSTAGE/brte/15.265

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