

Title (en)

METHOD TO USE A REACTION BY-PRODUCT AS A CALIBRATOR FOR ENZYMATIC ASSAYS

Publication

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Application

EP 91905984 A 19910227

Priority

- CA 2053868 A 19910227
- US 48735890 A 19900301

Abstract (en)

[origin: WO9113169A1] A method to use a reaction by-product as a calibrator in an automated enzymatic assay is described. In particular, the reaction by-product pyruvate is used as an instrument calibration standard to measure the activity of alanine aminotransferase. Use of this method eliminates errors due to inaccurate pipetting and corrects for small optical deviations from the wavelength of interest in the instrument. Left uncorrected, pipetting error and optical deviation negatively impact the accuracy of the enzyme activity calculation. In the fluorescence mode, calibration with a pyruvate standard also eliminates having to use unstable NADH standards. The pyruvate calibration standard of this invention is shown to be stable in standard stability testing. This method can be extended to a number of other automated enzymatic assays. Like alanine aminotransferase, the accuracy of the activity calculation for other enzymes should be increased by use of this procedure.

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Citation (search report)

- [X] PATENT ABSTRACTS OF JAPAN vol. 5, no. 168 (C-77)(840) 27 October 1981 & JP-A-56 096 698 (SHIMAZU SEISAKUSHO K.K.) 4 August 1981
- [A] ARCHS. ORAL. BIOL. vol. 17, 1972, GB pages 1133 - 1141; M.LARMAS: 'Alanine and aspartate aminotransferases in sound and carious human dentine.'
- See references of WO 9113169A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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