

Study of Amino Acid Transmembranar Transport

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A study for amino acid transmembranar transport study in human red cells is presented. The isotope dilution GC/MS technique was used in SIM mode.

Efflux of ¹⁴N labelled amino acid was calculated by using as internal standard the ¹⁵N labelled amino acid. The quantitation of amino acids, as trifluoroacetyl butyl ester derivative, was performed on a chromatographic column coupled to a mass spectrometer (GC-MS). The method was validated in the range 0-100 µg/ml. Small values of the amino acid transmembranar transport were detected for the amino acid studied glycine and leucine.

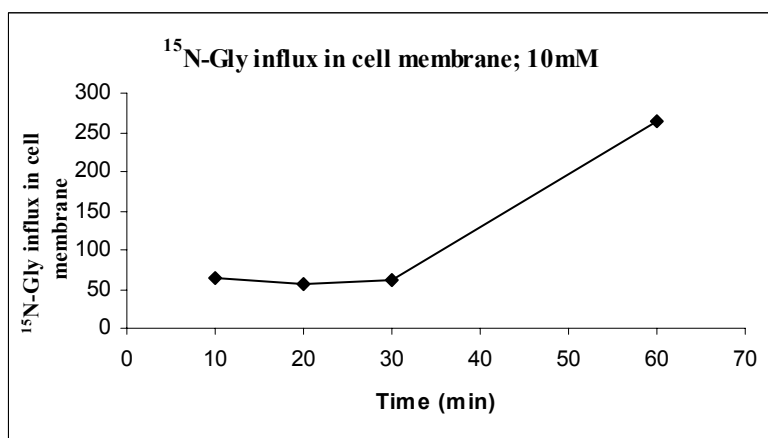


Fig. 1: Glycine influx study versus time of incubation. Gly: 10mM; Time: 0– 60 min.

[1] M. Culea, S. Neamtu, N. Palibroda, M. Borsa, S. Nicoara, J. Molec. Structure 348 (1995) 377-380.