

AMINO ACIDS - URINE (qualitative, screen)

Relevant disorders

Disorders of amino acid transport including Cystinuria, Hartnup disease, Lysinuric protein intolerance, Iminoglycinuria, Fanconi syndrome.

Phenylketonuria, Maple Syrup Urine Disease, Urea cycle disorders.

Related Metabolic Tests

Amino acids – urine (quantitative)

Quantitative orotic acid, qualitative organic acids

Amino acids – plasma (quantitative)

Indication for Test

Urine amino acids can be estimated qualitatively by thin layer chromatography (TLC) as part of investigations for inborn errors of metabolism.

Monitoring of patients already diagnosed with a metabolic disorder, urgent samples and requested repeat samples should be done by quantitative analysis.

Methodology

Thin layer chromatography on cellulose plates. Amino acids are visualised using Ninhydrin stain.

Sample requirements

5ml urine in a plain universal container (random sample or aliquot of a 24 hour collection).

Turn Around Time

5 – 14 days (but if requested urgently can be performed more quickly).

Transport information/Contact details

Send all samples by first class post or courier if urgent to:

Department of Clinical Chemistry
Sheffield Children's NHS Foundation Trust
Western Bank, Sheffield
S10 2TH, UK

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References

- Ireland and Read Ann. Clin. Biochem. 9 (1972), 129