

OROTIC ACID

Relevant disorders

Urea cycle disorders, disorders of pyrimidine metabolism, mitochondrial disorders

Related Metabolic Tests

Urinary organic acids
Plasma and urine amino acids

Indication for Test

Orotic acid measurement is used to monitor patients with urea cycle disorders. It can also be used to determine carrier status or exclude OTC deficiency after an allopurinol loading test.

Methodology

Stable isotope dilution Gas Chromatography Mass Spectrometry.

Sample requirements

10 mL aliquot of a random or 24 hour urine (no preservative).

Transport information/Contact details

Send by first class post. Normal packaging.

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Turn Around Time

5 – 14 days

Reference Ranges

Orotic acid < 3.5 $\mu\text{mol}/\text{mmol}$ creatinine

(N.B: reference range only valid with data produced by the Department of Clinical Chemistry, Sheffield Children's NHS Foundation Trust).

References

- Rimoldi et al. A new stable isotope method for measurement of orotic acid utilising solvent extracted urine. *J.Inher.Metab.Dis.* 17 (1994) 243-244.
- Burlina et al. Allopurinol Challenge test in Children. *J. Inher.Metab.Dis.*15 (1992) 707-712.