

Very Long Chain Fatty Acids (VLCFA)

Synonyms

VLCFA, peroxisomal function tests

Clinical Indication

Indicated in the investigation of a number of peroxisomal disorders where there is a defect in the metabolism or processing of long chain fatty acids. Patients may present with a spectrum of disease from life threatening neonatal Addisonian crises and severe hypotonia to progressive neurological deterioration and peripheral neuropathy in adults.

Plasma very long chain fatty acids (especially C26:0) are elevated in peroxisomal biogenesis or metabolism disorders such as X-linked adrenoleukodystrophy, adrenomyeloneuropathy, Refsum disease and Zellweger Syndrome.

Phytanic acid may also be raised in Refsum's disease.

Part of Profile / See Also

C22, C24, C26, C24/C22 and C26/C22 ratios, phytanate and pristanate

Request Form

Combined Pathology manual blood form or ICE request

Availability / Frequency of Analysis

Referred test: Analysed by [GOS 8692](#) if specific criteria met.

Turnaround Time

Approximately 3 weeks

Patient Preparation

It is important fasting samples are collected in children over 18 months old.

Sample Requirements

Specimen Type

Plasma

Volume


Minimum volume 0.2 mL

Container



Green top (li-heparin) tube.

Or  Paediatric green (li-Heparin) tube

Or  Paediatric orange (Lithium Heparin) tube

Samples should be transported to laboratory immediately.

Reference Range & Units

Supplied on report

Interferences

Haemolysed samples are not suitable for analysis

Interpretation & Clinical

Decision Value (if applicable)

Clinical interpretation provided on report

References

Test code

Lab Handling



Accredited to
ISO 15189:2012