

Leukocyte Enzyme Assay for VLCADD

CPT Code: 82657

Availability: Send specimen(s) overnight express to be received Monday-Friday, excluding major holidays. Please use FedEx or UPS – DO NOT SHIP VIA POSTAL SERVICE.

Turnaround Time: One week.

Minimum Volume: 6.0 ml pediatric minimum, or 10.0 ml adult minimum, of whole blood is required. Collect blood in purple cap (EDTA) tubes. Please be aware that vacuum blood collection tubes rarely collect the entire volume indicated on the tube, and additional tubes may be required to achieve the actual minimum volume required.

Specimen Handling: Send tubes in a styrofoam box on WET ice (not frozen) with a completed requisition (located on our website www.denvergenetics.org). Send samples on the day they are collected. Use overnight express to be received Monday-Friday, excluding major holidays. Please include any relevant patient information.

Interpretive Reference Range: Provided with report.

Use: Diagnosis of very long-chain acyl-coenzyme a dehydrogenase deficiency (VLCADD).

Methodology: Fluorometric enzyme assay with electron transfer flavoprotein (ETF).

Additional Information: If mutation analysis is also required, please order separate testing with our molecular genetics lab and review their requirements for testing.

Additional shipping notes (see diagrams on the following page):

- To preserve enzyme activity, blood for this test must remain COLD (approximately 4°C) but **NOT FROZEN**. If the specimen is not packaged for shipment immediately after being drawn, then it must be stored in a refrigerator at 4°C until it is shipped. Failure to refrigerate the specimen will result in loss of enzyme activity. Blood for this test should never be frozen, which will also cause loss of enzyme activity.
- The specimen must be shipped in a thick-walled Styrofoam box with a tight-fitting lid. Specimens shipped in a cardboard box only will not remain sufficiently cold. Prometheus boxes are NOT acceptable shipping containers, as they do not provide sufficient insulation.
- Direct contact between the specimen(s) and a frozen cold pack may result in frozen blood. However, too much insulation between the specimen(s) and the cold packs may not keep the blood sufficiently cold. Insulation between a cold pack & specimen(s) should consist of two paper towels. Insulation between double-bagged wet ice (regular water ice) and specimen(s) should consist of one paper towel.
- If wet ice (regular water ice) is used, then we suggest filling a gallon-size Ziploc freezer bag 3/4 full of wet ice, crushed or cubed, and then removing excess air from the baggie before sealing. Double-bag the wet ice, and again remove excess air before sealing the outer Ziploc bag. A combination of frozen cold packs and wet ice bags can be used, with wet ice in closest proximity to the specimen(s).
- Make sure that the box is tightly packed, using additional packing material as needed, to minimize shifting of contents during shipping and to ensure that the specimen(s) remain near the cold packs or wet ice during shipping.

Shipping Information for VLCAD enzyme assay specimens

A minimum volume of 6 mL whole blood (regardless of patient age – newborn or adult), collected in purple-topped (EDTA) tubes, is required.

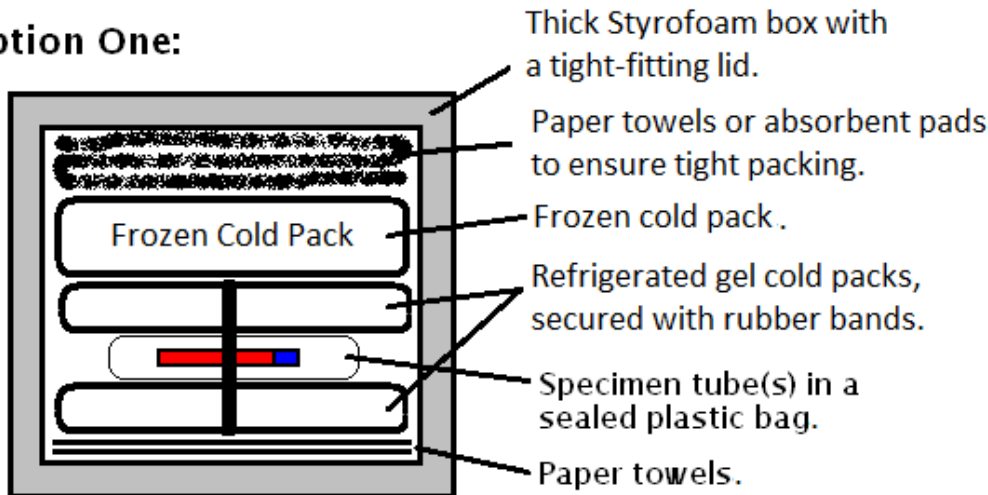
Blood should be shipped to this laboratory cold but not frozen:

Please use ONLY FedEx or UPS – DO NOT SHIP VIA POSTAL SERVICE

Children's Hospital Colorado
Clinical Laboratory – Biochemical Genetics
13123 E 16th Ave., LL, Room B0200
Aurora, CO 80045

Packing Illustrations:

Option One:



Option Two:

