DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE
BIOCHEMICAL GENETICS

Leukocyte Enzyme Assay for VLCAD

Address for Shipping, Mailing and Couriers:

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 Lab – Biochemical Genetics
13123 East 16th Ave, B120 – Room B0200
Aurora CO 80045

Shipping Information for VLCAD Enzyme Assay Specimens:

A minimum volume of 6mL whole blood (regardless of patient age – newborn or adult), collected in purple topped (EDTA) tubes, is **required.** Please send specimen(s) overnight express to be received Monday – Friday, excluding major holidays.

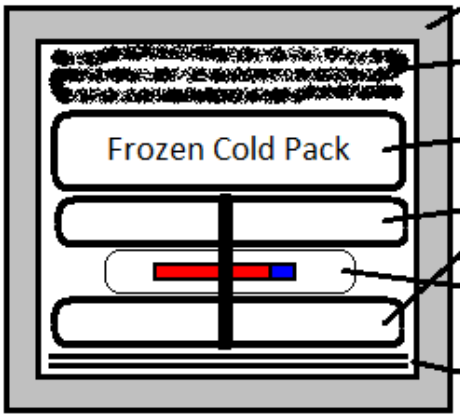
Additional Shipping Instructions (see diagrams on the following page):

- To preserve enzyme activity, blood for this test must remain COLD (approximately 4ºC) but **NOT FROZEN**. If the specimen is not packaged for shipment immediately after being drawn, then it must be stored in a refrigerator at 4ºC 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.

Please Note: If mutation analysis (ACADVL Sequencing or ACADVL Deletion-Duplication) is also required, please order testing with our molecular genetics team on a **separate requisition** (see Precision Diagnostics – Inherited Disease Requisition at www.childrenscolorado.org/labrequisitions). Please review their requirements for testing.

Packing Illustrations:

Option One:



Thick Styrofoam box with a tight-fitting lid.

Paper towels or absorbent pads to ensure tight packing.

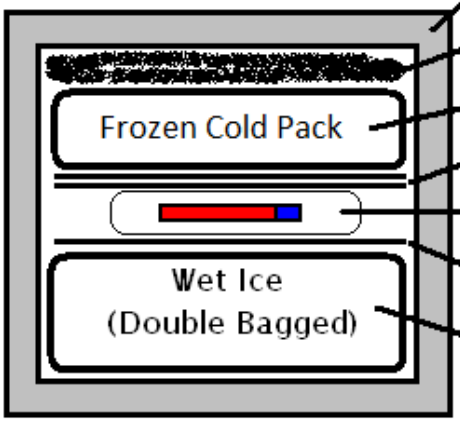
Frozen cold pack.

Refrigerated gel cold packs, secured with rubber bands.

Specimen tube(s) in a sealed plastic bag.

Paper towels.

Option Two:



Thick Styrofoam box with a tight-fitting lid.

Extra packing material (as needed).

Cold pack(s).

Paper towels (two).

Specimen tube(s) in a sealed plastic bag.

Paper towel (one).

Wet ice (double bagged).