Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB	8/1/1996
Sex:	Male
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	01/01/2017 12:34

Carnitine Panel

ARUP test code 0081110

Carnitine, Free, Serum/Plasma	**14 umol/L**	**L**	**(Ref Interval: 25-60)**
Carnitine, Total, Serum/Plasma	**21 umol/L**	**L**	**(Ref Interval: 34-86)**
Carnitine, Esterified, Serum/Plasma	7 umol/L		(Ref Interval: 5-29)
Carnitine E/F Ratio, Serum/Plasma	0.5 ratio		(Ref Interval: 0.1-1.0)
Acylcarnitine, Plasma Interpretation	See Note		

In this sample the concentrations of free and total carnitine, and acetylcarnitine were low. The acylcarnitine profile was normal. This could reflect decreased dietary intake and/or increased urinary losses of carnitine. Would evaluate carnitine intake and exclude generalized renal tubular dysfunction. If patient is receiving carnitine, would consider primary carnitine deficiency (OCTN2 transporter defect). Clinical correlation is necessary for further interpretation of this result.

INTERPRETIVE INFORMATION: Acylcarnitine, Plasma Interpretation

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

As of 04/12/2021, the method for the analysis of acylcarnitines in plasma has been updated. This update resulted in changes in values for several acylcarnitine species. Reference ranges have been updated as well to account for the differences due to the change in method. Values obtained before 04/12/2021 cannot be compared directly to values obtained after the change. Please refer to the reference ranges included in the report. If you have any questions or concerns related to this change, please contact Dr. M. Pasquali at ARUP Laboratories, (800) 242-5787 ext. 2853.

C2, Acetyl	**1.61 umol/L**	**L**	**(Ref Interval: 2.93-15.06)**
C3, Propionyl	0.15 umol/L		(Ref Interval: <=0.82)
C4, Iso-/Butyryl	0.06 umol/L		(Ref Interval: <=0.42)

H=High, L=Low, *=Abnormal, C=Critical

C5, Isovaleryl/2Mebutyryl	0.08 umol/L	(Ref Interval: <=0.24)
C5-DC, Glutaryl	0.05 umol/L	(Ref Interval: <=0.23)
C5-OH, 3-OH Isovaleryl	0.02 umol/L	(Ref Interval: <=0.07)
C6, Hexanoyl	<0.01 umol/L	(Ref Interval: <=0.12)
C8, Octanoyl	0.03 umol/L	(Ref Interval: <=0.22)
C8:1, Octenoyl	0.19 umol/L	(Ref Interval: <=0.60)
C10, Decanoyl	0.04 umol/L	(Ref Interval: <=0.33)
C10:1, Decenoyl	0.05 umol/L	(Ref Interval: <=0.27)
C12, Dodecanoyl	0.03 umol/L	(Ref Interval: <=0.13)
C12:1, Dodecenoyl	0.02 umol/L	(Ref Interval: <=0.13)
C12-OH, 3-OH-Dodecanoyl	<0.01 umol/L	(Ref Interval: <=0.02)
C14, Tetradecanoyl	0.01 umol/L	(Ref Interval: <=0.06)
C14:1, Tetradecenoyl	0.03 umol/L	(Ref Interval: <=0.15)
C14:2, Tetradecadienoyl	0.02 umol/L	(Ref Interval: <=0.08)
C14-OH, 3-OH-Tetradecanoyl	<0.01 umol/L	(Ref Interval: <=0.01)
C14:1-OH, 3-OH-Tetradecenoyl	<0.01 umol/L	(Ref Interval: <=0.04)
C16, Palmitoyl	0.06 umol/L	(Ref Interval: <=0.12)
C16:1, Palmitoleyl	0.01 umol/L	(Ref Interval: <=0.04)
C16-OH, 3-OH-Palmitoyl	0.01 umol/L	(Ref Interval: <=0.02)
C16:1-OH, 3-OH-Palmitoleyl	<0.01 umol/L	(Ref Interval: <=0.02)
C18, Stearoyl	0.03 umol/L	(Ref Interval: <=0.06)
C18:1, Oleyl	0.06 umol/L	(Ref Interval: <=0.18)
C18:2, Linoleyl	0.05 umol/L	(Ref Interval: <=0.10)
C18-OH, 3-OH-Stearoyl	<0.01 umol/L	(Ref Interval: <=0.02)
C18:1-OH, 3-OH-Oleyl	<0.01 umol/L	(Ref Interval: <=0.02)
C18:2-OH, 3-OH-Linoleyl	<0.01 umol/L	(Ref Interval: <=0.02)

H=High, L=Low, *=Abnormal, C=Critical

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Carnitine, Free, Serum/Plasma	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
Carnitine, Total, Serum/Plasma	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
Carnitine, Esterified, Serum/Plasma	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
Carnitine E/F Ratio, Serum/Plasma	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
Acylcarnitine, Plasma Interpretation	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C2, Acetyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C3, Propionyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C4, Iso-/Butyryl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C5, Isovaleryl/2Mebutyryl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C5-DC, Glutaryl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C5-OH, 3-OH Isovaleryl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C6, Hexanoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C8, Octanoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C8:1, Octenoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C10, Decanoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C10:1, Decenoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C12, Dodecanoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C12:1, Dodecenoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C12-OH, 3-OH-Dodecanoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C14, Tetradecanoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C14:1, Tetradecenoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C14:2, Tetradecadienoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C14-OH, 3-OH-Tetradecanoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C14:1-OH, 3-OH-Tetradecenoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C16, Palmitoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C16:1, Palmitoleyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C16-OH, 3-OH-Palmitoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C16:1-OH, 3-OH-Palmitoleyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C18, Stearoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C18:1, Oleyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C18:2, Linoleyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C18-OH, 3-OH-Stearoyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C18:1-OH, 3-OH-Oleyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM
C18:2-OH, 3-OH-Linoleyl	22-088-145842	3/29/2022 3:32:00 PM	4/2/2022 7:51:59 AM	4/7/2022 10:15:00 AM

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical