

|                                                       |                                                 |                                             |                    |                  |
|-------------------------------------------------------|-------------------------------------------------|---------------------------------------------|--------------------|------------------|
| Patient ID<br><b>SA00089414</b>                       | Patient Name<br><b>TESTINGRNV, SAMPLEREPORT</b> | Birth Date<br><b>1982-06-29</b>             | Gender<br><b>F</b> | Age<br><b>34</b> |
| Order Number<br><b>SA00089414</b>                     | Client Order Number<br><b>SA00089414</b>        | Ordering Physician<br><b>CLIENT, CLIENT</b> | Report Notes       |                  |
| Account Information<br><b>C7028846 DLMP Rochester</b> |                                                 | Collected<br><b>20 Apr 2017 12:00</b>       |                    |                  |

## Acylcarnitines, Quantitative, S

### Acetylcarnitine, C2

 **20.10 nmol/mL** MCR  
Reference Value  
2.00–17.83  
High

### Acrylylcarnitine, C3:1

**<0.02 nmol/mL** MCR  
Reference Value  
< 0.07

### Propionylcarnitine, C3

**0.48 nmol/mL** MCR  
Reference Value  
< 0.88

### Formiminoglutamate, FIGLU

 **0.45 nmol/mL** MCR  
Reference Value  
< 0.14  
High

### Iso-/Butyrylcarnitine, C4

**0.78 nmol/mL** MCR  
Reference Value  
< 0.83

### Tiglylcarnitine, C5:1

 **0.25 nmol/mL** MCR  
Reference Value  
< 0.11  
High

### Isovaleryl-/2-Methylbutyrylcarn C5

 **0.55 nmol/mL** MCR  
Reference Value  
< 0.51  
High

### 3-OH-iso-/butyrylcarnitine, C4-OH

 **0.42 nmol/mL** MCR  
Reference Value  
< 0.18  
High

### Hexenoylcarnitine, C6:1

**0.02 nmol/mL** MCR  
Reference Value  
< 0.15

### Hexanoylcarnitine, C6

 **0.20 nmol/mL** MCR  
Reference Value  
< 0.17  
High

### 3-OH-isovalerylcarnitine, C5-OH

**0.08 nmol/mL** MCR  
Reference Value  
< 0.10

### Benzoylcarnitine

**0.01 nmol/mL** MCR  
Reference Value  
< 0.10

### Heptanoylcarnitine, C7

**0.02 nmol/mL** MCR  
Reference Value  
< 0.06

### 3-OH-hexanoylcarnitine, C6-OH

**0.06 nmol/mL** MCR  
Reference Value  
< 0.09

### Phenylacetylcarnitine

**<0.02 nmol/mL** MCR  
Reference Value  
< 0.29

### Salicylcarnitine

**<0.05 nmol/mL** MCR  
Reference Value  
< 0.09

### Octenoylcarnitine, C8:1

**0.16 nmol/mL** MCR  
Reference Value  
< 0.88

### Octanoylcarnitine, C8

**0.47 nmol/mL** MCR  
Reference Value  
< 0.78

### Performing Site Legend

| Code | Laboratory                                       | Address                                  | Lab Director                | CLIA Certificate |
|------|--------------------------------------------------|------------------------------------------|-----------------------------|------------------|
| MCR  | Mayo Clinic Laboratories - Rochester Main Campus | 200 First Street SW, Rochester, MN 55905 | William G. Morice M.D. Ph.D | 24D0404292       |

|                                                       |                                                 |                                             |                    |                  |
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**Malonylcarnitine, C3-DC**
 0.27 nmol/mL  
High

MCR  
Reference Value  
< 0.26

**Decadienoylcarnitine, C10:2**

&lt;0.05 nmol/mL

MCR  
Reference Value  
< 0.26

**Decenoylcarnitine, C10:1**

0.32 nmol/mL

MCR  
Reference Value  
< 0.47

**Decanoylcarnitine, C10**

0.48 nmol/mL

MCR  
Reference Value  
< 0.88

**Methylmalonyl-/succinylcarn, C4-DC**
 0.06 nmol/mL  
High

MCR  
Reference Value  
< 0.05

**3-OH-decenoylcarnitine, C10:1-OH**

0.03 nmol/mL

MCR  
Reference Value  
< 0.13

**Glutaryl carnitine, C5-DC**
 0.16 nmol/mL  
High

MCR  
Reference Value  
< 0.11

**Dodecenoylcarnitine, C12:1**

0.05 nmol/mL

MCR  
Reference Value  
< 0.35

**Dodecanoylcarnitine, C12**

0.08 nmol/mL

MCR  
Reference Value  
< 0.26

**3-Methylglutaryl carnitine, C6-DC**

0.07 nmol/mL

MCR  
Reference Value  
< 0.43

**3-OH-dodecenoylcarnitine, C12:1-OH**

0.03 nmol/mL

MCR  
Reference Value  
< 0.13

**3-OH-dodecanoylcarnitine, C12-OH**

0.03 nmol/mL

MCR  
Reference Value  
< 0.08

**Tetradecadienoylcarnitine, C14:2**

0.03 nmol/mL

MCR  
Reference Value  
< 0.18

**Tetradecenoylcarnitine, C14:1**

0.04 nmol/mL

MCR  
Reference Value  
< 0.24

**Tetradecanoylcarnitine, C14**

0.04 nmol/mL

MCR  
Reference Value  
< 0.12

**Octanediolcarnitine, C8-DC**

0.04 nmol/mL

MCR  
Reference Value  
< 0.19

**3-OH-tetradecenoylcarnitine C14:1OH**

0.02 nmol/mL

MCR  
Reference Value  
< 0.13

**3-OH-tetradecanoylcarnitine, C14-OH**

0.01 nmol/mL

MCR  
Reference Value  
< 0.08

**Hexadecenoylcarnitine, C16:1**

0.04 nmol/mL

MCR  
Reference Value  
< 0.10

**Hexadecanoylcarnitine, C16**

0.10 nmol/mL

MCR  
Reference Value  
< 0.23

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**3-OH-hexadecenoylcarnitine, C16:1-OH**

0.01 nmol/mL

**MCR**
**Reference Value**  
< 0.06

**3-OH-hexadecanoylcarnitine, C16-OH**

0.01 nmol/mL

**MCR**
**Reference Value**  
< 0.06

**Octadecadienoylcarnitine, C18:2**

0.04 nmol/mL

**MCR**
**Reference Value**  
< 0.24

**Octadecenoylcarnitine, C18:1**

0.11 nmol/mL

**MCR**
**Reference Value**  
< 0.39

**Octadecanoylcarnitine, C18**

0.04 nmol/mL

**MCR**
**Reference Value**  
< 0.14

**Dodecanedioylcarnitine, C12-DC**

0.02 nmol/mL

**MCR**
**Reference Value**  
< 0.04

**3-OH-octadecadienoylcarn, C18:2-OH**

&lt;0.02 nmol/mL

**MCR**
**Reference Value**  
< 0.06

**3-OH-octadecenoylcarnitine C18:1-OH**

0.01 nmol/mL

**MCR**
**Reference Value**  
< 0.06

**3-OH-octadecanoylcarnitine, C18-OH**

0.00 nmol/mL

**MCR**
**Reference Value**  
< 0.03

**Comment (ACRNS)**
**1 MCR**

In this plasma sample, the concentrations of acetylcarnitine and 3-hydroxybutyrylcarnitine were elevated. This profile may be due to common physiological ketosis. However, if clinically indicated (episodes of hypoglycemia, hyperinsulinism) consider ruling out a possible diagnosis of short-chain 3-hydroxyacyl-CoA dehydrogenase (SCHAD) deficiency (see J Clin Invest 108:457-65, 2001; also Am J Med Genet 113:40-46, 2002). Consider sending another specimen to repeat the analysis and urine for organic acid analysis. Please contact the Biochemical Genetics consultant on call (Tel. 1-800-533-1710) if you have any questions.

**ADDITIONAL INFORMATION**

Flow Injection Analysis-Tandem Mass Spectrometry (FIA-MS/MS)

**Received:** 21 Apr 2017 13:52

**Reported:** 21 Apr 2017 14:49

**Laboratory Notes**

- 1** This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

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