



**GENOVA**  
DIAGNOSTICS<sup>®</sup>  
www.gdx.net • 800.522.4762

Genova Diagnostics, Inc.

Accession #:  
Order #:  
Reference #:  
Patient:  
Date of Birth:  
Age:  
Sex:  
Reprinted:  
Comment:

Date Collected: 03/06/2016  
Date Received: 03/08/2016  
Date of Report: 03/16/2016

Telephone:  
Fax:



## 0091 Organix® Comprehensive Profile - Urine

*Methodology: LC/Tandem Mass Spectroscopy, Colorimetric*

### Organix Interpretation

Interpretive Guides are downloadable at: [www.gdx.net/tests/interpretive-guides](http://www.gdx.net/tests/interpretive-guides)



## 0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

### Summary of Abnormal Findings

	<u>Findings</u>	<u>Intervention Options</u>	<u>Common Metabolic Association</u>
<b>Fatty Acid Metabolism</b>			
Suberate	High	Carnitine, B2	Fatty acid oxidation
<b>Carbohydrate Metabolism</b>			
No Abnormality Found			
<b>Energy Production Markers</b>			
No Abnormality Found			
<b>B-Complex Vitamin Markers</b>			
β-Hydroxyisovalerate	High	Biotin, B2	Impaired Isoleucine metabolism
<b>Methylation Cofactor Markers</b>			
No Abnormality Found			
<b>Neurotransmitter Metabolism Markers</b>			
Homovanillate	High	Evaluate stress issues	Dopamine turnover stimulation
Kynurenate	High	B6	Receptor antagonist
Picolinate	High	Add n-3 PUFA, limit protein intake	Inflammatory cytokine stimulation
<b>Oxidative Damage and Antioxidant Markers</b>			
No Abnormality Found			
<b>Detoxification Indicators</b>			
Pyroglutamate	High	N-acetylcysteine, other sulfur containing amino acids	Glutathione wasting
<b>Bacterial - General</b>			
Benzoate	High	Glycine	Hepatic Phase II conjugation
Hippurate	Very High	Glycine	Hepatic Phase II conjugation
Phenylacetate	High	Probiotics	Intestinal Bacterial Overgrowth
p-Hydroxybenzoate	High	Probiotics	Intestinal Bacterial Overgrowth
Indican	High	Probiotics	Intestinal Bacterial Overgrowth



## 0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

### L. acidophilus / general bacteria

No Abnormality Found

### Clostridial Species

3,4-Dihydroxyphenylpropionate	Very High	Probiotics (S. Boulardii)	Intestinal bacterial overgrowth, Clostridial species
-------------------------------	-----------	---------------------------	---

### Yeast/Fungal

No Abnormality Found



## 0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

This report is not intended for the diagnosis of neonatal inborn errors of metabolism.

Ranges are for ages 13 and over

Results  
mcg/mg creatinine

Quintile Ranking

1st 2nd 3rd 4th 5th

95% Reference Range

### Nutrient Markers

#### Fatty Acid Metabolism

(Carnitine & B2)

1. Adipate	5.6		6.2	<= 11.1
2. Suberate	2.4	H	2.1	<= 4.6
3. Ethylmalonate	1.7		3.6	<= 6.3

#### Carbohydrate Metabolism

(B1, B3, Cr, Lipoic Acid, CoQ10)

4. Pyruvate	<DL*		3.9	<= 6.4
5. L-Lactate	5.2		12.6	1.6-57.1
6. $\beta$ -Hydroxybutyrate	<DL*		2.1	<= 9.9

#### Energy Production (Citric Acid Cycle)

(B comp., CoQ10, Amino acids, Mg)

7. Citrate	363		601	56-987
8. Cis-Aconitate	31		51	18-78
9. Isocitrate	49		98	39-143
10. $\alpha$ -Ketoglutarate	6.1		19.0	<= 35.0
11. Succinate	4.8		11.6	<= 20.9
12. Fumarate	<DL*		0.59	<= 1.35
13. Malate	<DL*		1.4	<= 3.1
14. Hydroxymethylglutarate	2.6		3.6	<= 5.1



## 0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

This report is not intended for the diagnosis of neonatal inborn errors of metabolism.

Ranges are for ages 13 and over

Results	1st	2nd	3rd	4th	5th	95% Reference Range
---------	-----	-----	-----	-----	-----	---------------------

### B-Complex Vitamin Markers

(B1, B2, B3, B5, B6, Biotin)

15. a-Ketoisovalerate	<DL*	0.25	<= 0.49
16. a-Ketoisocaproate	<DL*	0.34	<= 0.52
17. a-Keto-β-methylvalerate	<DL*	0.38	<= 1.10
18. Xanthurenate	0.30	0.34	<= 0.46
19. β-Hydroxyisovalerate	8.4 H	7.6	<= 11.5

### Methylation Cofactor Markers

(B12, Folate)

20. Methylmalonate	0.7	1.7	<= 2.3
21. Formiminoglutamate	1.0	1.2	<= 2.2

### Cell Regulation Markers

#### Neurotransmitter Metabolism Markers

(Tyrosine, Tryptophan, B6, antioxidants)

22. Vanilmandelate	3.1	1.6 3.9	1.2-5.3
23. Homovanillate	6.6 H	1.9 5.7	1.4-7.6
24. 5-Hydroxyindoleacetate	5.6	2.1 5.6	1.6-9.8
25. Kynurenate	1.4 H	1.0	<= 1.5
26. Quinolinate	3.5	4.0	<= 5.8
27. Picolinate	9.2 H	8.0	2.8-13.5

#### Oxidative Damage and Antioxidant Markers

(Vitamin C and other antioxidants)

28. p-Hydroxyphenyllactate	0.37	0.39	<= 0.66
29. 8-Hydroxy-2-deoxyguanosine	2.7	5.3	<= 7.6

(Units for 8-hydroxy-2-deoxyguanosine are ng/mg creatinine)

## 0091 Organix® Comprehensive Profile - Urine

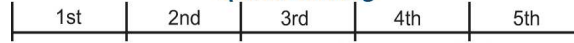
Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

This report is not intended for the diagnosis of neonatal inborn errors of metabolism.

Ranges are for ages 13 and over

Results  
mcg/mg creatinine

Quintile Ranking

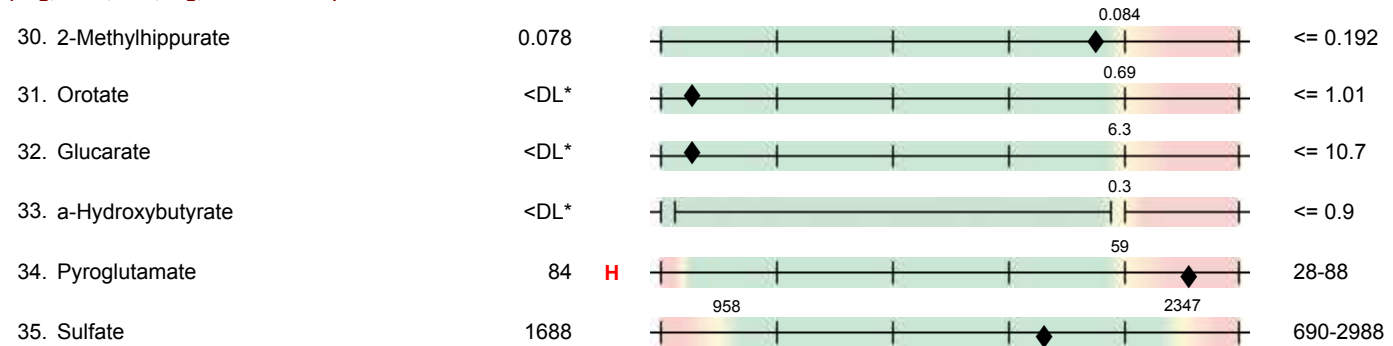


95% Reference Range

### Toxicants and Detoxification

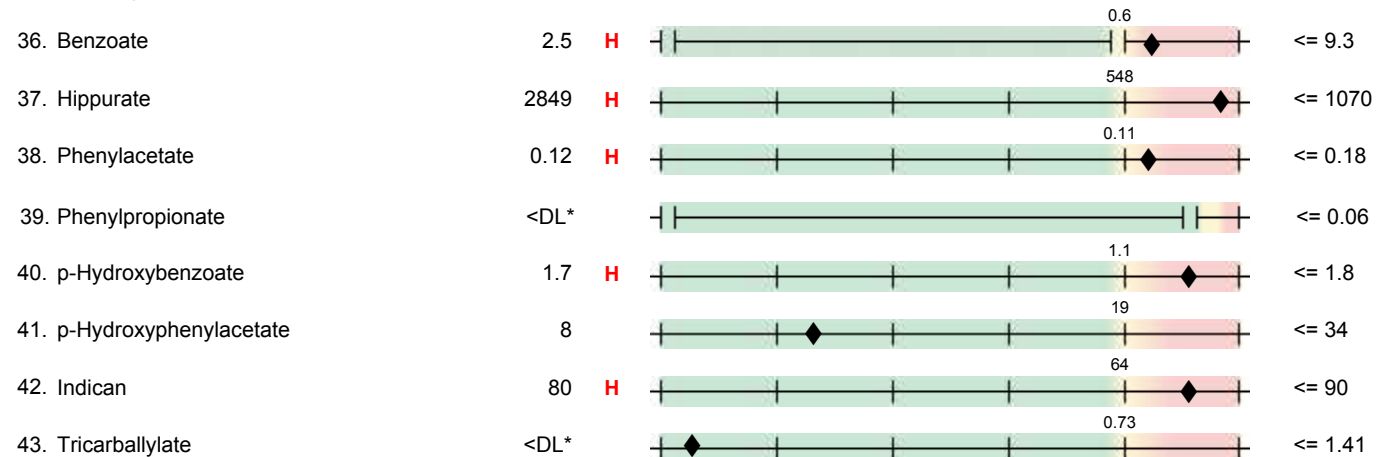
#### Detoxification Indicators

(Arg, NAC, Met, Mg, antioxidants)



### Compounds of Bacterial or Yeast/Fungal Origin

#### Bacterial - general



#### L. acidophilus / general bacterial



#### Clostridial species



#### Yeast / Fungal



Creatinine = 50 mg/dL

\* <DL = less than detection limit

\*\* >LIN = greater than linearity limit

Georgia Lab Lic. Code #067-007

CLIA ID# 11D0255349

New York Clinical Lab PFI #4578

Florida Clinical Lab Lic. #800008124

Testing Performed by Genova Diagnostics, Inc. 3425 Corporate Way, Duluth, GA 30096

Laboratory Director: Robert M. David, PhD



0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

Supplement Recommendation Summary

With knowledge of a patient's full medical history and concerns, the Organix Comprehensive Profile laboratory results may be used to help healthcare professionals create an individually optimized nutritional support program. Based strictly on the results from this test, the summary table below shows estimates of nutrient doses that may help to normalize nutrient-dependent metabolic functions.

Customized Vitamin and Mineral Formulation

Nutrients listed in this section are normally contained in a multi-vitamin preparation. "Base" amounts may be used to ensure health even when no abnormalities are found.

Nutrient	Daily Amounts	
	Base	Units Added
Vitamin A*	2500 IU	
B-Carotene*	5500 IU	
Vitamin C	250 mg	500 mg
Vitamin D*	400 IU	
Vitamin E	100 IU	200 IU
Vitamin K*	100 mcg	
Thiamin (B1)	5 mg	
Riboflavin (B2)	5 mg	
Niacin (B3)	25 mg	
Pyridoxine (B6)	15 mg	60 mg
Folic Acid (or 5-Methyl-THF)	400 mcg	
Vitamin B12	50 mcg	
Biotin	100 mcg	1000 mcg
Pantothenic Acid (B5)	25 mg	
Calcium citrate	500 mg	
Iodine*	75 mcg	
Magnesium	250 mg	
Zinc*	15 mg	
Selenium	100 mcg	50 mcg
Copper	1 mg	
Manganese*	5 mg	
Chromium	200 mcg	
Molybdenum*	25 mcg	
Boron*	1 mg	

\* Nutrients with an asterisk are not modified based on the Organix test results.

MM01

## 0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

### Other Items Indicated for individual supplementation

Various conditionally essential nutrients and other potentially beneficial interventions appear in this section only if relevant abnormalities are present. These ingredients are not included in the customized vitamin formula on the previous page.

Nutrient	Amount
Potential to benefit from probiotics	High
Carnitine	400 mg
Glycine	4000 mg
N-Acetylcysteine	400 mg
S. Boulardii	As needed