



Patient: **SAMPLE  
PATIENT**

DOB:

Sex:

MRN:

**3301 Organix® Comprehensive Profile - Urine**  
Methodology: LC/Tandem Mass Spectrometry, Colorimetric



**Summary of Abnormal Findings**

Biomarkers	Findings	Metabolic Pathway
<b>Fatty Acid Metabolism</b>		
Adipate	<b>Borderline High</b>	Fatty acid oxidation
Suberate	<b>Borderline High</b>	Fatty acid oxidation
<b>Carbohydrate Metabolism</b>		
L-Lactate	<b>H</b>	Glycolysis
b-Hydroxybutyrate	<b>Borderline High</b>	Ketone production
<b>Energy Production Markers</b>		
Succinate	<b>Borderline High</b>	Citric acid cycle
<b>B-Complex Vitamin Markers</b>		
No Abnormality Found		
<b>Methylation Cofactor Markers</b>		
No Abnormality Found		
<b>Neurotransmitter Metabolism Markers</b>		
Vanilmandelate	<b>Borderline High</b>	Epinephrine & norepinephrine metabolism
Homovanillate	<b>H</b>	Dopamine metabolism
5-Hydroxyindoleacetate	<b>H</b>	Serotonin metabolism
Kynurenate	<b>Borderline High</b>	Tryptophan pathway
<b>Oxidative Damage and Antioxidant Markers</b>		
p-Hydroxyphenyllactate	<b>H</b>	Gut bacterial metabolism
8-Hydroxy-2-deoxyguanosine	<b>H</b>	Oxidative damage
<b>Detoxification Indicators</b>		
Sulfate	<b>L</b>	Transsulfuration pathway
<b>Bacterial - General</b>		

**Summary of Abnormal Findings**

Biomarkers	Findings	Metabolic Pathway
Hippurate	<b>Borderline High</b>	Gut bacterial metabolism
Phenylacetate	<b>H</b>	Gut bacterial metabolism
p-Hydroxybenzoate	<b>Borderline High</b>	Gut bacterial metabolism
p-Hydroxyphenylacetate	<b>H</b>	Gut bacterial metabolism
<b>L. acidophilus/General Bacteria</b>	No Abnormality Found	
<b>Clostridial Species</b>	No Abnormality Found	
<b>Yeast/Fungal</b>		
D-Arabinitol	<b>Borderline High</b>	Yeast product

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

Ranges: Ages 13 and over

Results mcg/mg creatinine	QUINTILE DISTRIBUTION					95% Reference Range
	1st	2nd	3rd	4th	5th	

**Nutrient Markers**

**Fatty Acid Metabolism**

(Carnitine & B2)

Item	Results	Value	Reference Range
1. Adipate	8.5	6.2	<= 11.1
2. Suberate	2.9	2.1	<= 4.6
3. Ethylmalonate	2.0	3.6	<= 6.3

**Carbohydrate Metabolism**

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

Item	Results	Value	Reference Range
4. Pyruvate	<DL	3.9	<= 6.4
5. L-Lactate	19.0 <b>H</b>	8.5	0.6 - 16.4
6. β-Hydroxybutyrate	4.5	2.1	<= 9.9

**Energy Production (Citric Acid Cycle)**

(B Comp., CoQ10, Amino Acids, Mg)

Item	Results	Value	Reference Range
7. Citrate	487	601	56 - 987
8. Cis-Aconitate	38	51	18 - 78
9. Isocitrate	62	98	39 - 143
10. α-Ketoglutarate	<DL	19.0	<= 35.0
11. Succinate	12.9	11.6	<= 20.9
12. Fumarate	<DL	0.59	<= 1.35
13. Malate	0.6	1.4	<= 3.1
14. Hydroxymethylglutarate	3.2	3.6	<= 5.1

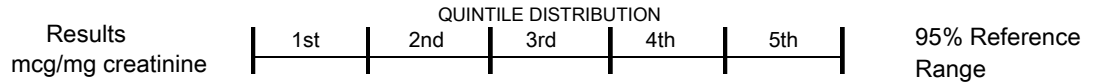


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**Nutrient Markers**

**B-Complex Vitamin Markers**

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

Item	Results	Value	95% Reference Range
15. α-Ketoisovalerate	<DL	0.25	<= 0.49
16. α-Ketoisocaproate	<DL	0.34	<= 0.52
17. α-Keto-β-Methylvalerate	<DL	0.38	<= 1.10
18. Xanthurenate	<DL	0.34	<= 0.46
19. β-Hydroxyisovalerate	3.8	7.6	<= 11.5

**Methylation Cofactor Markers**

(B12, Folate)

20. Methylmalonate	1.0	1.7	<= 2.3
21. Formiminoglutamate	0.5	1.2	<= 2.2

**Cell Regulation Markers**

**Neurotransmitter Metabolism Markers**

(Tyrosine, Tryptophan, B6, Antioxidants)

22. Vanilmandelate	5.2	1.6 - 3.9	1.2 - 5.3
23. Homovanillate	9.1 <b>H</b>	1.9 - 5.7	1.4 - 7.6
24. 5-Hydroxyindoleacetate	10.5 <b>H</b>	2.1 - 5.6	1.6 - 9.8
25. Kynurenate	1.5	1.0	<= 1.5
26. Quinolinate	<DL	4.0	<= 5.8
27. Picolinate	3.1	8.0	2.8 - 13.5

**Oxidative Damage and Antioxidant Markers**

(Vitamin C and Other Antioxidants)

28. p-Hydroxyphenyllactate	1.13 <b>H</b>	0.39	<= 0.66
29. 8-Hydroxy-2-deoxyguanosine	13.7 <b>H</b>	5.3	<= 7.6

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

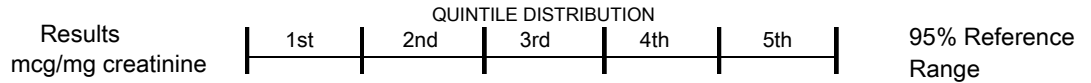


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### Toxicants and Detoxification

#### Detoxification Indicators

(Arg, NAC, Met, Mg, Antioxidants)

Item	Results	Quintile Distribution	95% Reference Range
30. 2-Methylhippurate	0.021	0.084	<= 0.192
31. Orotate	<DL	0.69	<= 1.01
32. Glucarate	<DL	6.3	<= 10.7
33. α-Hydroxybutyrate	<DL	0.3	<= 0.9
34. Pyroglutamate	46	59	28 - 88
35. Sulfate	400 <b>L</b>	958 - 2,347	690 - 2,988

### Compounds of Bacterial or Yeast/Fungal Origin

#### Bacterial - General

36. Benzoate	<DL	0.6	<= 9.3
37. Hippurate	570	548	<= 1,070
38. Phenylacetate	0.38 <b>H</b>	0.11	<= 0.18
39. Phenylpropionate	<DL		<= 0.06
40. p-Hydroxybenzoate	1.7	1.1	<= 1.8
41. p-Hydroxyphenylacetate	45 <b>H</b>	19	<= 34
42. Indican	32	64	<= 90
43. Tricarballic acid	<DL	0.73	<= 1.41

#### L. acidophilus / General Bacterial

44. D-Lactate	0.2	2.0	<= 4.1
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#### Clostridial Species

45. 3,4-Dihydroxyphenylpropionate	<DL		<= 0.05
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#### Yeast / Fungal

46. D-Arabinitol	43	36	<= 73
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Creatinine = 23 mg/dL

<DL = less than detection limit

>UL = greater than upper linearity limit

This test has been developed and its performance characteristics determined by Genova Diagnostics, Inc. It has not been cleared by the U.S. Food and Drug Administration.



## 3301 Organix® Comprehensive Profile - Urine

### Additional Considerations

**These supplement ranges are not adjusted for age or gender.**

Nutrient supplementation is at the *discretion of the treating clinician*. The supplement dose ranges provided below are meant for educational purposes only. These dosage ranges relate to findings commonly found on Genova's nutritional panels and do not apply to specific disease conditions where different dosages may be warranted. Final recommendations should be based on consideration of the patient's medical history and current clinical condition.

Nutrient	Nutrient Need	Clinician Recommendations
Vitamin C	High: 1000-2000 mg	
Vitamin E (mixed tocopherols)	High: 200-400 IU	
Vitamin B-1 (Thiamin)	Low: 10-25 mg	
Vitamin B-2 (Riboflavin)	Low: 10-25 mg	
Vitamin B-3 (Niacin)	Low: 10-50 mg	
Vitamin B-5 (Pantothenic Acid)	Low: 10-25 mg	
Vitamin B-6 (Pyridoxine)	Optional: 0-10 mg	
Magnesium	Optional: 0-100 mg	
Selenium	Optional: 0-50 mcg	
Carnitine	Optional: 0-500 mg	
Coenzyme Q10	Low: 20-60 mg	
Lipoic Acid	Low: 50-100 mg	
N-Acetylcysteine	Low: 100-200 mg	
Need for other antioxidants	High	

Various conditionally essential nutrients and other potentially beneficial interventions appear in this section only if relevant abnormalities are present.

Amino acids listed on this page result from functional markers of individual amino acid insufficiency and do not reflect amino acids measured in plasma.

# Organix™ (Organic Acids) Profile

## Specimen Collection Instructions

This specimen collection kit can be used for the following test(s):

0091 Organix<sup>SM</sup> Comprehensive - Urine

0291 Organix<sup>SM</sup> Basic - Urine

0097 Organix<sup>SM</sup> Dysbiosis - Urine

0087 DNA/Oxidative Stress Marker (8-OHdG) - Urine

0088 Neopterin/Biopterin Profile - Urine

0391 Organix Comprehensive NY - Urine

0397 Organix Compounds of Microbial Origin NY - Urine

3291 Organix Basic NY - Urine

### IMPORTANT:

All patient specimens require two unique identifiers  
(*patient's name and date of birth*), as well as *date of collection*.

**Patient's first and last name, date of birth, gender, and date of collection** must be recorded on the **Test Requisition Form** as well as all tube(s) and/or vial(s), using a permanent marker, or the test may not be processed.

## Specimen

Overnight Urine, 12 ml, frozen

### Collection Materials

- Clean collection container  
(NOT included in this kit)
- Clear-cap plastic vial  
with thymol preservative
- Disposable pipette

### Shipping Materials

- Absorbent pad
- Ice pack
- Test Requisition Form
- Personal Health Assessment Form
- Biohazard bag with side pocket
- Specimen collection kit box
- FedEx® Clinical Lab Pak and Billable Stamp



Call 800.522.4762 or visit our website at [www.gdx.net](http://www.gdx.net)

*Please read all instructions carefully before beginning.*

## Patient Preparation

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- It is best to **ship your specimen within 24 hours of collection**. Please refer to the enclosed shipping instructions **before** you collect to determine what days you can ship your specimen.
- **It is not necessary** to discontinue nutritional supplements prior to this specimen collection. Abnormalities that may be found will reveal special needs that have not been met by recent dietary and supplemental intake.
- **Decrease** fluid intake to avoid excessive dilution of the urine
  - » For adults, **restrict** intake to three 8 oz. glasses or less for 24 hours
  - » **Make sure that no more than 8 oz.** of this is consumed after 8:00 PM the evening prior to urine collection
- **Do not collect** urine during menstruation
- Vial contains preservative - **Do Not Rinse**

## Urine Collection

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1. **Write** patient's **first and last name, date of birth, gender** and **date of collection** on the Test Requisition Form (located in the pouch on top of the Specimen Collection Kit Box), as well as on the clear-cap plastic vial, using a permanent marker.
  - **IMPORTANT:** To ensure accurate test results you must provide the requested information.
2. **Empty** bladder before going to bed at night. **Do not collect** this urine.
3. **Collect** urine (if any) during the night and first morning urine into a clean container.
4. **Pipette** urine, using a fresh disposable pipette, into the clear-cap plastic vial to the 12 ml mark (**DO NOT OVERFILL**). **Screw** the cap on tightly.
5. **Dispose** of remaining urine.
6. **Freeze** the clear-cap plastic vial and ice pack.

## Specimen Preparation

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1. **Place** the frozen urine specimen, frozen ice pack, and absorbent pad into the biohazard bag.
2. **Staple** payment to the bottom right-hand corner of the completed Test Requisition Form and complete the Personal Health Assessment Form; **Fold** and **place** them in the side pocket of the biohazard bag.
3. **Seal** the biohazard bag, **place** it into the specimen collection kit box, and **close** the box.

## Checklist (Prior to Shipping)

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### 1. Vial

- Patient's first and last name, date of birth, gender, and date of collection are written on the vial
- Vial cap is screwed on tightly

### 2. Frozen

- Clear-cap plastic vial (urine)
- Ice pack

### 3. Test Requisition Form with Payment

- Test Requisition Form is complete
- Personal Health Assessment Form is complete
- Payment is included



## LISTA DE COMPROBACIÓN (ANTES DEL ENVÍO)

### 1. Tubo

- Nombre, apellidos y fecha de nacimiento del paciente** presentes en la etiqueta del tubo
- La muestra y el líquido **no deben exceder** la LÍNEA DE LLENADO
- El tubo debe estar **herméticamente cerrado**

### 2. Tubo de orina - Congelado

- Tubo de recolección con tapón transparente

### 3. Formulario de solicitud de prueba con pago

- El formulario de solicitud de prueba está completo **La prueba aparece indicada, el nombre, los apellidos, la fecha de nacimiento, el sexo y la fecha de recolección** están registrados
- El formulario de evaluación de salud del paciente está completo
- Se incluye el pago o se abonó en línea en [www.gdx.net/prc](http://www.gdx.net/prc)

### 4. Devolver al laboratorio

- Asegurarse de devolver la muestra con el embalaje original y de situarlo en el interior del material de envío incluido.

## INSTRUCCIONES DE RECOLECCIÓN DE MUESTRAS MEDIANTE ORGANIX INSTRUCCIONES PARA LA RECOLECCIÓN DE ORINA DE PACIENTES



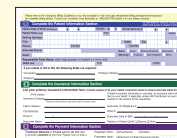
Pueden recopilarse las siguientes pruebas con estas instrucciones:

<b>Organix<sup>SM</sup> completo n.º 3301</b>	<b>Orina</b>
<b>Organix<sup>SM</sup> básico n.º 3304</b>	<b>Orina</b>
<b>Organix<sup>SM</sup> disbiosis n.º 3302</b>	<b>Orina</b>



**Puede que la prueba no se procese sin esta información:**

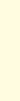
**Formulario de solicitud de prueba  
Proporcione:**



- Nombre y apellidos del paciente**
- Fecha de nacimiento**
- Sexo**
- Fecha de recolección**

**Todos los tubos**

**Incluir en las etiquetas:**



- Nombre y apellidos del paciente**
- Fecha de nacimiento del paciente**

### Muestra

Orina

### Materiales adicionales

- Recipiente de recolección transparente (no incluido)
- Bolsa de riesgo biológico con material absorbente
- Formulario de evaluación de salud del paciente
- Sobre prepagado

### Materiales de recolección de orina



Tubo de recolección con tapón transparente



Pipeta

## ENVIAR LAS MUESTRAS AL LABORATORIO

Consultar las instrucciones de envío que se envían adjuntas con la caja del kit.



Llame al **800.522.4762** o visite nuestro sitio web en [www.gdx.net](http://www.gdx.net)

## RECOLECCIÓN

24 HORAS ANTES DE LA PRUEBA:

-24

NOCHE PREVIA A LA PRUEBA:



- Ingesta de alimentos habitual**, pero evitar consumir en exceso cualquier comida o las dietas extremas.
- El consumo de líquido** debe limitarse a ocho (8) vasos de 8 oz durante un plazo de 24 horas.
- Congelar** el bloque de hielo adjunto durante un mínimo de 8 horas antes del envío.

**IMPORTANTE:** Para garantizar la precisión de los resultados, se **DEBE** facilitar la información solicitada.

**1** Etiquetar todos los tubos con el nombre, los apellidos y la fecha de nacimiento del paciente.

**2** Escribir el nombre, los apellidos, la fecha de nacimiento, el sexo y la fecha de la recolección en el formulario de solicitud de prueba.

**3** Si el paciente se despertara a orinar durante la noche (a falta de seis horas para levantarse) debe recolectar esa orina en un recipiente de recolección esterilizado o en un recipiente limpio y desechable y refrigerarlo. Al despertarse, el paciente debe recolectar la primera orina de la mañana en el mismo recipiente. Rellenar el recipiente y depositar la orina adicional en el inodoro.

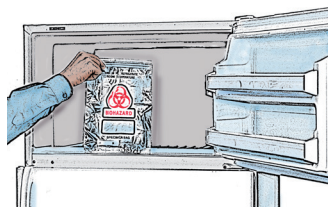


**4** Utilizar la pipeta para transferir la orina del recipiente de recolección en el tubo de recolección con tapón transparente hasta llegar a la marca de 12 ml. **No sobrepasar la marca.**



**5** Volver a cerrar el tubo herméticamente. Desechar la orina restante.

**6** Colocar el tubo y el bloque de hielo en la bolsa de riesgo biológico y congelar durante un mínimo de 2 horas.



## RECOLECCIÓN

MAÑANA DE LA RECOLECCIÓN:



- Evitar** el contacto con la piel y los ojos. En caso de contacto con los ojos, lavar abundantemente con agua durante 15 minutos. En caso de contacto con la piel, lavar abundantemente con jabón y agua. En caso de ingesta, contactar con el centro de toxicología de inmediato.
- Las mujeres** no deben recolectar muestras de orina durante la menstruación.

Para consultar la información completa, visitar: [www.gdx.net/tests/prep](http://www.gdx.net/tests/prep)