

**Reporting Title:** D-,L- 2-Hydroxyglutaric Acid, QN, U  
**Performing Location:** Rochester

**Necessary Information:**

- 1. Age and sex of patient are required.
- 2. [Biochemical Genetics Patient Information](#) (T602) is recommended, but not required, to be filled out and sent with the specimen to aid in the interpretation of test results.

**Specimen Requirements:**

**Supplies:** Urine Tube, 10 mL (T068)  
**Container/Tube:** Plastic, 10-mL urine tube  
**Specimen Volume:** 10 mL

**Pediatric:** If the collection volume appears insufficient, submit as much specimen as possible in a single container; the laboratory will determine if volume is sufficient for test.

**Collection Instructions:**

- 1. Collect a random urine specimen (first morning void preferred)
- 2. No preservative

**Forms:**

- 1. [Biochemical Genetics Patient Information](#) (T602)
- 2. If not ordering electronically, complete, print, and send a [Biochemical Genetics Test Request](#) (T798) with the specimen.

Specimen Type	Temperature	Time	Special Container
Urine	Frozen (preferred)	416 days	
	Ambient	14 days	
	Refrigerated	14 days	

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
614619	Interpretation	Alphanumeric		79303-4
614620	D-2-Hydroxyglutaric acid	Numeric	mmol/mol Cr	80100-1
614621	L-2-Hydroxyglutaric acid	Numeric	mmol/mol Cr	80099-5
614622	Reviewed By	Alphanumeric		18771-6

LOINC® and CPT codes are provided by the performing laboratory.

**Supplemental Report:**

No

**CPT Code Information:**

83921 x 2

Reference Values:

Age	D-2-hydroxyglutaric acid (mmol/mol creatinine)	L-2-hydroxyglutaric acid (mmol/mol creatinine)
0-11 months	< or =14.11	< or =17.38
12-23 months	< or =13.76	< or =17.03
24-35 months	< or =13.38	< or =16.63
3 years	< or =12.96	< or =16.18
4 years	< or =12.20	< or =15.35
5 years	< or =11.40	< or =14.44
6 years	< or =10.56	< or =13.46
7 years	< or =9.71	< or =12.43
8 years	< or =8.93	< or =11.44
9 years	< or =8.21	< or =10.50
10 years	< or =7.56	< or =9.66
11 years	< or =6.99	< or =8.94
12 years	< or =6.47	< or =8.33
13 years	< or =6.01	< or =7.83
14 years	< or =5.60	< or =7.44
15 years	< or =5.23	< or =7.14
16 years	< or =4.91	< or =6.93
17 years	< or =4.63	< or =6.78
18 years	< or =4.40	< or =6.69
19 years	< or =4.21	< or =6.63
20 years	< or =4.07	< or =6.60
21 years	< or =3.96	< or =6.59
22 years	< or =3.88	< or =6.58
23 years	< or =3.81	< or =6.56
24 years	< or =3.76	< or =6.54
25 years	< or =3.71	< or =6.50
26 years	< or =3.67	< or =6.44
27 years	< or =3.63	< or =6.37
28 years	< or =3.59	< or =6.27
29 years	< or =3.56	< or =6.15
30 years	< or =3.54	< or =6.02
31 years	< or =3.52	< or =5.87
32 years	< or =3.50	< or =5.72
33 years	< or =3.49	< or =5.57
34 years	< or =3.48	< or =5.41
35 years	< or =3.46	< or =5.26
36 years	< or =3.45	< or =5.13

Test Definition: 2HGA

2-Hydroxyglutaric Acid Chiral Analysis,  
Quantitative, Random, Urine

37 years	< or =3.43	< or =5.00
38 years	< or =3.42	< or =4.88
39 years	< or =3.40	< or =4.78
40 years	< or =3.39	< or =4.70
41 years	< or =3.37	< or =4.62
42 years	< or =3.35	< or =4.55
43 years	< or =3.33	< or =4.50
44 years	< or =3.30	< or =4.44
45 years	< or =3.28	< or =4.40
46 years	< or =3.24	< or =4.35
47 years	< or =3.21	< or =4.31
48 years	< or =3.17	< or =4.27
49 years	< or =3.13	< or =4.23
50 years	< or =3.10	< or =4.19
51 years	< or =3.07	< or =4.16
52 years	< or =3.04	< or =4.12
53 years	< or =3.01	< or =4.10
54 years	< or =2.99	< or =4.07
55 years	< or =2.97	< or =4.04
56 years	< or =2.95	< or =4.01
57 years	< or =2.93	< or =3.98
58 years	< or =2.91	< or =3.94
59 years	< or =2.89	< or =3.91
60 years	< or =2.87	< or =3.87
61 years	< or =2.85	< or =3.84
62 years	< or =2.83	< or =3.80
63 years	< or =2.79	< or =3.78
64 years	< or =2.76	< or =3.75
65 years	< or =2.71	< or =3.73
66 years	< or =2.67	< or =3.72
67 years	< or =2.61	< or =3.71
68 years	< or =2.56	< or =3.69
69 years	< or =2.50	< or =3.68
70 years	< or =2.44	< or =3.66
71 years	< or =2.38	< or =3.64
72 years	< or =2.32	< or =3.61
73 years	< or =2.26	< or =3.56
74 years	< or =2.21	< or =3.50
75 years	< or =2.16	< or =3.43
76 years	< or =2.10	< or =3.35
77 years	< or =2.05	< or =3.26
78 years	< or =2.00	< or =3.17
79 years	< or =1.94	< or =3.08

Test Definition: 2HGA

2-Hydroxyglutaric Acid Chiral Analysis,  
Quantitative, Random, Urine

80 years	< or =1.89	< or =2.99
81 years	< or =1.84	< or =2.91
82 years	< or =1.80	< or =2.84
83 years	< or =1.75	< or =2.78
84 years	< or =1.71	< or =2.73
85 years	< or =1.68	< or =2.69
86 years	< or =1.65	< or =2.67
87 years	< or =1.64	< or =2.65
88 years	< or =1.63	< or =2.64
> or =89 years	< or =1.62	< or =2.64