Test Definition: AAPD

Amino Acids, Quantitative, Random, Urine

Reporting Title: Amino Acids, QN, Random, U
Performing Location: Rochester

Specimen Requirements:

Container/Tube: Plastic, 6-mL tube (Supply T465)
Specimen Volume: 2 mL
Collection Instructions: Collect a random urine specimen.
Additional Information:
1. Patient's age is required.
2. Include family history, clinical condition (asymptomatic or acute episode), diet, and drug therapy information.
Forms: If not ordering electronically, submit a Biochemical Genetics Request Form (Supply T439) with the specimen.

Specimen Type	Temperature	Time
Urine	Frozen	14 days

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
34466	Phosphoserine	Numeric	nmol/mg Cr	28600-5
34467	Phosphoethanolamine	Numeric	nmol/mg Cr	28604-7
3452	Taurine	Numeric	nmol/mg Cr	30563-1
3456	Asparagine	Numeric	nmol/mg Cr	27317-7
3455	Serine	Numeric	nmol/mg Cr	26741-9
34477	Hydroxyproline	Numeric	nmol/mg Cr	28601-3
3460	Glycine	Numeric	nmol/mg Cr	27325-0
3457	Glutamine	Numeric	nmol/mg Cr	27043-9
34478	Aspartic Acid	Numeric	nmol/mg Cr	30061-6
34479	Ethanolamine	Numeric	nmol/mg Cr	28605-4
3477	Histidine	Numeric	nmol/mg Cr	27904-2
3454	Threonine	Numeric	nmol/mg Cr	27322-7
3459	Citrulline	Numeric	nmol/mg Cr	27056-1
34480	Sarcosine	Numeric	nmol/mg Cr	28610-4
3472	Beta-alanine	Numeric	nmol/mg Cr	26968-8
3461	Alanine	Numeric	nmol/mg Cr	27326-8

Result ID	Reporting Name	Type	Unit	LOINC®
3458	Glutamic Acid	Numeric	nmol/mg Cr	30348-7
3476	1-Methylhistidine	Numeric	nmol/mg Cr	27044-7
3478	3-Methylhistidine	Numeric	nmol/mg Cr	27046-2
34481	Argininosuccinic Acid	Numeric	nmol/mg Cr	32229-7
3479	Carnosine	Numeric	nmol/mg Cr	27294-8
34482	Anserine	Numeric	nmol/mg Cr	28596-5
34483	Homocitrulline	Numeric	nmol/mg Cr	32248-7
3480	Arginine	Numeric	nmol/mg Cr	27296-3
3462	Alpha-aminoadipic Acid	Numeric	nmol/mg Cr	26725-2
34484	Gamma-amino-n-butyric Acid	Numeric	nmol/mg Cr	28593-2
3473	Beta-aminoisobutyric Acid	Numeric	nmol/mg Cr	26973-8
3463	Alpha-amino-n-butyric Acid	Numeric	nmol/mg Cr	27341-7
34485	Hydroxylysine	Numeric	nmol/mg Cr	30050-9
3483	Proline	Numeric	nmol/mg Cr	26726-0
3474	Ornithine	Numeric	nmol/mg Cr	27292-2
3466	Cystathionine	Numeric	nmol/mg Cr	26964-7
3465	Cystine	Numeric	nmol/mg Cr	26962-1
3475	Lysine	Numeric	nmol/mg Cr	27304-5
3467	Methionine	Numeric	nmol/mg Cr	26963-9
3464	Valine	Numeric	nmol/mg Cr	26961-3
3470	Tyrosine	Numeric	nmol/mg Cr	26966-2
3468	Isoleucine	Numeric	nmol/mg Cr	26965-4
3469	Leucine	Numeric	nmol/mg Cr	27323-5
3471	Phenylalanine	Numeric	nmol/mg Cr	26967-0
34486	Tryptophan	Numeric	nmol/mg Cr	28608-8
34487	Allo-isoleucine	Numeric	nmol/mg Cr	22699-3
3481	Interpretation (AAPD)	Alphanumeric		12467-7

CPT Code: 1 × 82139

Reference Values:

Urine Amino Acid Reference Values (nmol/mg creatinine)		Age Groups					
		< or =12 Months	13-35 Months	3-6 Years	7-8 Years	9-17 Years	> or =18 Years
		(n=515)	(n=210)	(n=197)	(n=74)	(n=214)	(n=835)
Phosphoserine	PSer						
Phosphoethanolamine	PEtN	15-341	33-342	19-164	12-118	<88	<48
Taurine	Tau	37-8300	64-3255	76-3519	50-2051	57-2235	24 -1531
Asparagine	Asn	25-1000	62-884	28-412	38-396	22-283	25-238
Serine	Ser	18-4483	284 -1959	179-1285	153-765	105-846	97-540
Hydroxyproline	Hyp	<2536	<89	<46	<19	<22	
Glycine	Gly	362-18614	627-6914	412-5705	449-4492	316-4249	229-2989
Glutamine	Gln	139-2985	263 -2979	152-1325	164-1125	188-1365	93-686
Aspartic Acid	Asp	<64	<56		<9		<10
Ethanolamine	EtN	282-3782	256-947	193-643	137-564	158-596	95-471
Histidine	His	145-3833	427-3398	230-2635	268-2147	134-1983	81-1128
Threonine	Thr	25-1217	55-763	30-554	25-456	37-418	31-278
Citrulline	Cit				<9	<14	
Sarcosine	Sar			<9	<2	<3	<3
Beta-Alanine	bAla				<25	<49	<52
Alanine	Ala	93-3007	101-1500	64-1299	44-814	51-696	56-518
Glutamic Acid	Glu	<243	12-128	<76	<39	<62	<34
1-Methylhistidine	1MHis	17-419	18-1629	10-1476	19-1435	12-1549	23-1339
3-Methylhistidine	3MHis	88-350	86-330	56-316	77-260	47-262	70-246
Argininosuccinic Acid	Asa	<77	<48	<37	<24	<69	<15
Carnosine	Car	27-1021	16-616	18-319	<161	<109	<35
Anserine	Ans		<820	<398	<141	<369	<38
Homocitrulline	Hcit	<295	11-158	<71	<62	<33	<30
Arginine	Arg	10-560	20-395	14-240	<134	<153	<114
Alpha-aminoadipic Acid	Aad	10-275	15-324	10-135	<84	<76	<47
Gamma Amino-n-butyric Acid	GABA			<11		<5	<5

Beta-aminoisobutyric Acid	bAib	18-3137	<980	15-1039	24-511	11-286	<301
Alpha-amino-n-butyric Acid	Abu	<63	<56	<38		<31	
Hydroxylysine	Hyl	<150	<57	<34	<26	<31	<12
Proline	Pro	28-2029	<119	<78	<20	<28	<26
Ornithine	Orn		<70	<44	<17	<18	<25
Cystathionine	Cth	<302	<56	<26	<18	<44	
Cystine	Cys	12-504	11-133	<130	<56	<104	10-98
Lysine	Lys	19-1988	25-743	14-307	17-276	10-240	15-271
Methionine	Met		<41	<25		<20	<16
Valine	Val	11-211	11-211	<139	16-91	<75	11-61
Tyrosine	Tyr	39-685	38-479	23-254	22-245	12-208	15-115
Isoleucine	Ile	<86	<78	<62	<34	<28	<22
Leucine	Leu	<200	15-167	12-100	13-73	<62	<51
Phenylalanine	Phe	14-280	34-254	20-150	21-106	11-111	13-70
Tryptophan	Trp	14-315	14-315	10-303	10-303	15-229	18-114
Allo-isoleucine	AlloIle				<8	<8	<7