

## Blood Amino Acid Reference Range (umol/l)

	Premature	Newbor	1-3 m	2-6m	9m-2y	3m-6y	19m-10	3-10y	16-18y	6-18y	Adult
ASP	0-30	<16	0-8		<9		<20		<14		<24
GLU	0-135	20-107			6m-3y 19-100			23-250		7-65	14-192
ASN			6-33			72-144				32-62	30-69
SER	94-243		76-152		33-128			79-112		71-181	65-193
HIS	10-90	49-114	43-83	96-137	24-112			24-85		64-106	32-107
GLN						475-746				360-740	369-711
ARG	10-90	22-88	22-74	56-142	11-65			23-86		44-130	21-138
GLY	0-1010	224-514	106-222	175-296	56-308			117-223		158-302	120-554
THR	95-335	114-335	64-224	191-364				42-95		74-202	79-193
ALA	274-476	236-410	134-416	177-413	99-313			137-305		193-545	210-661
TYR	0-320	42-99	30-134	72-216	11-122			31-71		43-88	22-87
TRP	0-60	<67							1-16 y 24-79	>16 y 20-95	20-95
MET	25-45	9-41	3-39	16-49	3-29			11-16		16-37	6-40
VAL	30-230	80-246	96-292		57-262			128-283		156-288	141-317
PHE	121-454	73-205									48-109
ILE	20-60	27-53	45-73	38-123	26-94			28-84		38-95	37-98
LEU	20-120	47-109	44-164		45-155			56-178		79-174	75-175
LYS	70-310	114-269	37-169		45-144			71-151		108-233	83-238

Phenylketonuric 2-3 days = > 272

Phenylketonuric untreated = 7 - 1815

Phenylketonuric treated = 121 - 363

Reference: Text Book of Clinical Chemistry, 2019