

	REG ID	Control- males females	AO Serum	DS Serum	Relatives of AO
(S)-4-hydroxymandelonitrile +	C03742	15	16	17	17
2-HG	C02930	20	21	18	21
2-hydroxybutanoic acid	C03594	0	0	0	0
2-keto-isovaleric acid	C00141	28	25	29	30
2-methoxybenzoic acid	C00109	0	0	0	0
3-hydroxyanthranilic acid	C00432	20	20	20	20
3-hydroxyphenyllactic acid	C02794	14	15	18	19
3-methoxytyramine	C00587	0	0	0	0
3-phosphoserine	C03005	13	13	14	14
3-ureidopropionic acid	C02642	18	20	18	19
3,4-dihydroxymandelic acid	C05380	17	16	15	0
3,4-dihydroxyphenylpropanoic acid	C15447	18	19	16	19
4-trimethylammonobutanoate	C01181	25	24	23	24
5-methyl-THF	C00440	0	0	0	0
5-methylcytosine	C03376	21	22	20	21
5'-methylthioadenosine	C00170	0	0	18	19
6-aminocaproic acid	C02378	24	0	0	25
6-O-methylguanine	n/a	0	0	13	0
6-phosphogluconic acid	C00345	15	14	15	15
a-KG	C00026	23	20	22	22
acetylcholine+	C03396	22	23	21	22
acetic acid	C00417-C02341	19	18	0	21
adenine	C00147	22	22	22	22
adenosine	C00232	17	14	17	19
adenylosuccinate	C03794	0	0	0	0
ALA ribonucleotide	C04577	0	0	0	0
alanine	C00041-C00133	30	30	28	28
allantoin	C01551	25	25	22	22
arginine	C02385	32	31	31	31
asparagine	C16438	24	23	25	24
aspartic acid	C16433	26	27	22	22
b-alanine	C00099	0	0	0	0
betaine	C00719	31	31	30	31
carbamate+	C00487	30	31	30	30
CDP	C00112	0	0	0	0
CDP-choline	C00307	0	0	0	6
choline+	C00114	32	33	29	30
citraconic acid	C02226	24	21	23	24
citruillic acid	C00327	24	24	24	23
CMP	C00055	0	0	0	5
creatine	C00300	27	28	29	28
creatinine	C00791	31	31	29	30
CTP	C00063	0	0	0	0
cystathionine	C00142	20	20	19	20
cysteine	C00736-C00097	0	18	19	18
cysteine-S-sulfate	C05424	21	22	23	24
cytosine	C01420	26	26	27	27
cytidine	C00475	18	17	16	20
cytosine	C00080	20	21	19	20
D-arabinono-1,4-lactone	C00652	22	22	23	24
D-erythrose-4-phosphate	C00279	0	0	0	0
D-glucose-7-phosphate	C00282	0	0	13	0
dADP	C00206	0	0	0	0
dAMP	C00360	0	0	0	0
dATP	C00121	0	0	0	0
dCMP	C00239	0	0	0	0
dCTP	C00458	0	0	0	0
dehydroascorbic acid	C00422	0	0	24	15
deoxyguanosine	C00330	0	0	0	0
deoxyinosine	C05512	15	15	0	5
deoxyuridine	C00526	18	0	18	19
dihydroorotate	C00337	18	18	21	20
dimethylglycine	C01026	0	0	0	0
DL-COFA	C00355	18	18	17	17
dopamine	C03758	0	0	0	0
dTMP	C00364	0	0	0	0
dUDP	C00459	0	0	0	0
dUMP	C00365	0	0	0	0
epinephrine	C00788	20	20	20	19
FAO	C00016	0	0	0	0
FMN	C00061	0	0	0	0
folic acid	C00054	0	0	0	0
fumaric acid	C00122	20	20	20	21
GABA	C00334	20	19	20	18
GDP	C00035	0	0	0	0
GDP-L-fucose	C00325	0	0	0	0
glucosyl-lactone	C00198	0	0	0	0
glutamine	C00003	27	27	29	27
glutaminic acid	C00302	29	29	25	24
glutathione	C00051	0	0	0	10
glutathione disulfide	C00127	18	18	19	19
glyceric acid	C00258	29	29	27	28
glycine	C00037	27	27	26	26
glycylglycine	C00227	17	0	20	12
GMP	C00144	0	0	0	13
GTP	C00044	0	0	0	0
guanine	C17349	18	17	17	18
guanidinooacetate	C00581	23	23	22	20
guanine	C00242	18	0	18	19
guanosine	C00087	15	0	22	21
histamine	C00388	0	0	0	0
histidine	C00718	28	28	27	27
homocysteine	C00330	24	24	22	25
hydroxyphenyllactic acid	C03672	24	24	23	23
hypoxanthine	C00062	30	28	27	27
IDP	C00104	0	14	15	14
imidazole-4-acetate	C02835	23	24	22	23
IMP	C00130	13	17	14	15
inosine	C00794	19	0	24	23
lyxuronic acid	C01717	20	20	19	19
lyxurine	C03178	25	25	25	26
L-arginino-succinate	C03406	19	20	19	19
L-cystic acid	C00506	0	0	0	0
L-HABA	C03084	26	26	25	26
L-tyrosine methyl ester	C03404	16	14	15	14
lactic acid	C01432	0	0	0	0
levulinic acid	n/a	0	0	22	0
lysine	C00047-C00739	32	32	30	31
malic acid	C01384	0	17	16	0
malic acid	C00711	25	25	24	25
methionine	C00073	29	29	28	29
methylglyoxal	C00546	22	21	19	0
methylmalonic acid	C03170	26	26	25	26
mevalonic acid	C00418	23	23	22	24
N-acetyl-DL-alanine	n/a	26	26	25	26
N-acetyl-L-glutamic acid	C00624	0	0	0	11
N-acetylaspatic acid	C01042	0	17	0	20
N-acetylasparylglutamic acid	C12720	17	18	19	19
N-carbamoyl-L-aspartate	C00438	0	0	0	0
N-methyltryptamine	C06213	13	17	16	15
NAD+	C00003	0	0	0	6
NADPH	C00005	0	13	0	0
nicotinamide	C00153	24	23	23	24
NMN	C00435	0	0	14	6
octopamine	C04227	20	20	19	19
ornithine	C01603	29	29	27	28
orotic acid	C00295	22	22	20	21
orotidylic acid	C01103	0	0	0	0
oxalacetic acid	C00036	0	0	0	0
panthoic acid	C00864	23	23	23	23
phenethylamine	C05332	0	0	0	0
phenylalanine	C02057	32	32	30	30
phosphocreatine	C02305	14	0	19	18
phosphoenolpyruvate	C00074	0	0	0	0
phosphorylcholine+	C00588	21	21	21	22
picolinic acid	C10164	21	22	21	21
proline	C16435	32	33	32	32
PRPP	C00119	0	0	0	0
putrescine	C00067	24	24	24	25
pyridoxine	C00134	17	0	17	18
pyridoxine	C00314	21	20	18	19
pyruvic acid	C00022	0	0	0	0
quinolinic acid	C03722	17	17	18	18
S-adenosyl-L-homocysteine	C00021	0	0	0	0
S-adenosyl-L-methionine+	C00019	13	0	18	20
serine	C00716	24	24	23	23
serotrans	C00780	0	0	17	0
spermidine	C00315	26	26	27	26
spermine	C00750	23	23	25	24
succinyl-L-homocysteine	C00402	24	24	22	24
taurine	C00045	30	30	29	29
thiamine+	C00378	0	0	20	19
thymidine	C00214	18	16	16	17
thymine	C00178	21	22	21	20
tryptamine	C00398	0	17	18	17
tryptophan	C00006	30	30	30	30
tyramine	C00483	20	20	20	18
tyrosine	C01536	30	30	30	29
UDP	C00015	0	0	0	0
UDP-D-glucose	C00029	0	0	0	6
UMP	C00105	0	0	0	5
uracil	C00106	23	23	21	23
uric acid	C00366	30	30	30	30
uridine	C00299	25	26	24	25
UTP	C00075	0	0	0	0
valine	C16436	31	31	30	31
xanthine	C00385	26	26	25	25
xanthosine	C01762	16	17	0	10
xanthurenic acid	C02470	21	19	19	0
XMP	C00655	0	0	0	0
γ-glutamylcysteine	C00669	0	0	0	0