

A. S Matrix

	v1	v2	v3	v4	v5	v6	b1	b2	b3	b4	b5	b6	b7	b8	b9	b10	b11	b12	b13	b14	b15	b16	b17	b18	b19	b20
Asparate	-1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arginnosuccinate	1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Formate	0	1	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arginne	0	1	-1	0	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Urea	0	0	1	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ornithine	0	0	1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Citroline	-1	0	0	1	1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CarbonMethyl Phosphate	0	0	0	-1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATP	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Disphosphate	1	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMP	1	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phosphate	0	0	0	1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O2	0	0	0	0	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	-1
NADPH	0	0	0	0	-1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	-1	0	0
H+	0	0	0	0	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	-1	0
NO	0	0	0	0	1	-1	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	1	0	0	0	0	0
NADP	0	0	0	0	1	-1	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	1	0	0	0
H2O	0	0	0	0	1	-1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	1	0	0	0	0	0

B. A matrix

A Matrix	Asparate	innosuccin	Formate	Arginne	Urea	Ornithine	Citroline	Methyl Ph	ATP	isphosphat	AMP	Phosphate	O2	NADPH	H+	NO	NADP	H2O
C	4	10	4	6	1	5	6	1	10	0	10	0	0	21	0	0	21	0
H	7	18	2	14	4	12	13	2	16	4	14	3	0	30	1	0	29	2
N	1	4	0	4	2	2	3	1	5	0	5	0	0	7	0	1	7	0
O	4	6	4	2	1	2	3	5	13	7	7	4	2	17	0	1	17	1
P	0	0	0	0	0	0	0	1	3	2	1	0	0	3	0	0	3	0
S	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0