







	tC	tW	GLY	RES	FER	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
С	1	0	-0.2	0	0	0	-0.5	-0.167	0	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	0	1	-0.167	0	0	0	0	0	0	0	0	0	-0.01	0
NT	0	0	0	0	0	-1	0	0.334	0	0	-1	-1	-1	1	1	1	-1	0	0
ADP	0	0	-0.8	-0.98	0	1	0	0.666	0.82	1	0	0	0	0	0	0	0	0.05	0.05
ATP	0	0	0.8	0.98	0	0	0	-0.666	-0.82	-1	0	0	0	0	0	0	0	-0.05	-0.05
CI	0	0	0.2	-0.02	-1	0	-0.5	0	-0.18	0	0	0	0	0	0	0	0	0	0
W	0	-1	0	0.02	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIP	0	0	0	0	0	0	0	0	0.18	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	1	0	0	-1	0	0	0	0	0
mRNA	0	0	0	0	0	0	0	0	0	0	0	1	0	0	-1	0	0	0	0
tRNA	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	-1	0	-0.94	0.94
DNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.95	-0.95
р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01

	tC	tW	GLY	RES	FER	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
x_C	0.5	0	0	0	0	0	0	0	0	0	Ö	Ö	Ö	0	0	0	Ö	0	0
x_C x_W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
С	4	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1	0
NT	0	0	0	0	0	2	0	4	0	0	2	2	2	0	0	0	2	0	0
ADP	0	0	2	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ATP	0	0	7	7	0	0	0	2	2	2	0	0	0	0	0	0	0	2	2
CI	0	0	31	2	2	0	2	0	2	0	0	0	0	0	0	0	0	0	0
W	0	11	0	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIP	0	0	0	0	0	0	0	0	64	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0
mRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
tRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
DNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	tC	tW	GLY	RES	FER	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
x_C	0	0	0	0	0	0	0	0	0	0	Ō	Ö	Ō	0	0	0	Ō	0	0
x_W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ADP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIP	35	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
mRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
tRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DNA	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	2	0	0
DNA TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

kcat

kcatf	[,1]	[,2]	[,3]	[,4]	[,5]	[, 6]	[,7]	[,8]	[,9]	[,10]	[,11]	[, 12]	[,13]	[,14]	[,15]	[,16]	[,17]	[,18]	[,19]
	150	200	200	30	300	7	14	61	40	10	40	30	40	40	200	40	200	12000	600
kcatb	15	20	20	3	30	1	1	6	4	0	0	0	0	0	0	0	0	0	0

Keq

[1,]	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]	[,9]	[,10]	[,11]	[, 12]	[,13]	[, 14]	[, 15]	[, 16]	[, 17]	[, 18]	[,19]
	80	0.909090909090909	542.5	542.5	155	3.5	7	50.8333333333333	160	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

[,11] [,12] [,13] 0 0 0

[,14] 0.001

[,15] [,16] [,17] [,18] [,19] 0.001 0.001 0 0 0

minimal phi	constraint
-------------	------------

[,10] 0.122

[,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8] [,9] (0.5)

[1,]