Function	Rip8802	EpSB	EcSB	RgSB	RaSB	EaSB	EtSB	UCYN-A	Paul-A
Informational									
rRNA & tRNA	+	+	+	+	+	+	+	+	+
Ribosomal proteins	+	+	+	+	+	+	+	+	+
Aminoacyl-tRNA-synthases	+	+	+	+	+	+	+	95%	+
Transcription	+	+	+	+	+	+	+	+	+
DNA replication	+	+	+	+	+	+	+	+	75%
DNA repair	+	89%	89%	89%	89%	89%	89%	74%	37%
Energy production									
Glycolysis	+	90%+	90%+	90%+	90%+	90%+	90%+	90%	90%
Entner-Douderoff	+	+	+	+	+	+	+		+
Pentose Phosphate	+	+	+	+	+	+	+	80%	80%
TCA (OAA,Pyr → 2-OG)	+	+	+	+	+	+	+	20%	20%
TCA (2-OG → OAA)	+	60%	60%	60%	20%	20%	20%	_	_
NAD(P)H oxidoreductase	+	+	+	+	+	+	+	+	+
Cytochrome b <sub>6</sub> /f	+	+	+	+	+	+	+	+	75%
Cytochrome c oxidase	+	++	++	++	++	++	++	+	+
Heme biosynthesis	+	+	+	+	+	+	+	+	90%
ATP synthase	+	+	+	+	+	+	+	+	+ C404
Photosystem I	+ +	_	<u> </u>	_ E0/	<u> </u>	_	-	+ 5%	64%
Photosystem II		- 000/		5%		_	_		+
Chlorophyll biosynthesis Antenna proteins	+ +	80%	80%	80%	30%	_	_	90%	90%
Carotenoid biosynthesis	+					+		57%	86%
Nitrogen fixation	Т	+	+	+	+		+	37%	0070
Nitrogen nxation  Nitrogenase and cofactor	+	+	+	+	+	+	+	+	10%-
Ammonia assimilation	+	+	+	+	+	+	+	43%	29%
Metabolism	,			•				45%	2370
Glycogen metabolism	+	+	+	+	+	+	+	20%	20%
Phospholipid synthesis	+	+	+	, , , , , , , , , , , , , , , , , , ,	+	+	+	83%	83%
Fatty acid synthesis	+	+	+	+	+	+	+	+	+
Purine synthesis	+	+	+	+	4	+	+	35%	35%
Pyrimidine synthesis	+	+	+	+	4	+	+	88%	62%
Amino acid synthesis Al	a +	+	4	4	4	+	4	+	_
Ar		+	+	+	4	+	+	25%	38%
As	0	+	+	+	+	+	+	+	+
As		+	+	+	+	+	+	50%	_
Cy		+	+	+	+	+	+	+	67%
Gl	n +	+	+	+	+	+	+	+	+
Gl	u +	+	+	+	+	+	+	+	_
Gl	y +	+	+	+	+	+	+	+	+
Hi	s +	+	+	+	+	+	+	-	50%
Ile	+	+	+	+	+	+	+	-	88%
Le	eu +	+	+	+	+	+	+	-	83%
Ly		+	+	+	+	+	+	+	+
Mo		+	+	+	+	+	+	50%	50%
Ph		+	+	+	+	+	+	70%	80%
Pr		+	+	+	+	+	+	33%	67%
Se		+	+	+	+	+	+	67%	+
Th	ır +	+	+	+	+	+	+	80%	80%
Tr		+	+	+	+	+	+	50%	42%
Ту		+	+	+	+	+	+	60%	70%
Va	al +	+	+	+	+	+	+	-	+
Cofactor synthesis									
Biotin	80%	60%	60%	60%	60%	40%	40%	20%	20%
Folate	89%	56%	67%	67%	67%	67%	56%	56%	56%
Lipoic acid	+	+	+	+	+	+	*	- F00/	+
NAD/NADP	+	700/	+	+	+	+	+	50%	4.40/
Pantothenate/CoA	9604	78%	89%	89%	89%	89%	89%	44%	44%
Pseudocobalamin	86% 71%	86% 71%	86% 71%	86% 71%	86% 71%	14% 71%	14% 71%	86% 71%	5% 57%
Pyridoxal 5-phosphate Riboflavin	83%	83%	83%	83%	83%	83%	83%	67%	
Thiamine	75%	75%	75%	75%	75%	75%	75%	67%	33%
mannic	75%	75%	73%	73%	73%	7 370	73%	0/%	3370