


C.reinhardtii Autopick

CAI Analyzer: 12.03.2012

Reference set:

 Chlamydomonas reinhardtii chloroplast, complete genome
Length:203828 Create:23-JAN-2004 Update:01-JAN-1900

Codon frequency of reference set:

[Chlamydomonas reinhardtii chloroplast, complete genome:](#)

Autopick analysis...

Protein genes: 69 Threshold: 15.0% Shrinkage per iteration: 50.0% Total iterations: 3



Picked genes and their final gCAI:

psbF(photosystem II protein VI)	(gCAI=0.722)
tufA(elongation factor Tu)	(gCAI=0.728)
atpF(ATP synthase CF0 B subunit)	(gCAI=0.728)
petB(cytochrome b6)	(gCAI=0.737)
psbE(photosystem II protein V)	(gCAI=0.756)
atpE(ATP synthase CF1 epsilon subunit)	(gCAI=0.757)
rpl23(ribosomal protein L23)	(gCAI=0.766)
psaJ(photosystem I subunit IX)	(gCAI=0.799)

Sequence length: 3657 Number of protein genes: 8 Total codons: 1219

Amino acid Codon Number Frequency per thousand															
Phe	UUU	32	26.3	Ser	UCU	11	9.0	Tyr	UAU	23	18.9	Cys	UGU	4	3.3
	UUC	29	23.8		UCC	0	0.0		UAC	17	13.9		UGC	0	0.0
Leu	UUA	78	64.0		UCA	24	19.7	STOP	UAA	8	6.6	STOP	UGA	0	0.0
	UUG	0	0.0		UCG	0	0.0		UAG	0	0.0	Trp	UGG	13	10.7
Leu	CUU	15	12.3	Pro	CCU	16	13.1	His	CAU	5	4.1	Arg	CGU	59	48.4
	CUC	0	0.0		CCC	0	0.0		CAC	19	15.6		CGC	0	0.0
	CUA	3	2.5		CCA	34	27.9	Gln	CAA	46	37.7		CGA	0	0.0
	CUG	1	0.8		CCG	1	0.8		CAG	2	1.6		CGG	0	0.0
ile	AUU	76	62.3	Thr	ACU	36	29.5	Asn	AAU	24	19.7	Ser	AGU	10	8.2
	AUC	13	10.7		ACC	0	0.0		AAC	27	22.1		AGC	1	0.8
	AUA	0	0.0		ACA	53	43.5	Lys	AAA	72	59.1	Arg	AGA	2	1.6
Met	AUG	36	29.5		ACG	2	1.6		AAG	2	1.6		AGG	0	0.0
Val	GUU	56	45.9	Ala	GCU	62	50.9	Asp	GAU	32	26.3	Gly	GGU	83	68.1
	GUC	0	0.0		GCC	2	1.6		GAC	15	12.3		GGC	4	3.3
	GUA	61	50.0		GCA	29	23.8	Glu	GAA	75	61.5		GGA	1	0.8
	GUG	1	0.8		GCG	1	0.8		GAG	3	2.5		GGG	0	0.0

0 unidentified codons.

Nucleotide frequency: A=1210 U=1184 G=664 C=599 X=0

GC Content: 34.54% 1st letter GC: 51.35% 2nd letter GC: 36.75% 3rd letter GC: 15.5%

Weight table from reference set:

Amino acid Codon Weight											
Phe	UUU	1	Ser	UCU	0.458	Tyr	UAU	1	Cys	UGU	1
	UUC	0.906		UCC	0		UAC	0.739		UGC	0
Leu	UUA	1		UCA	1	STOP	UAA	---	STOP	UGA	---
	UUG	0		UCG	0		UAG	---		Trp	UGG
Leu	CUU	0.192	Pro	CCU	0.471	His	CAU	0.263	Arg	CGU	1
	CUC	0		CCC	0		CAC	1		CGC	0
	CUA	0.038		CCA	1	Gln	CAA	1		CGA	0
	CUG	0.013		CCG	0.029		CAG	0.043		CGG	0
ile	AUU	1	Thr	ACU	0.679	Asn	AAU	0.889	Ser	AGU	0.417
	AUC	0.171		ACC	0		AAC	1		AGC	0.042
	AUA	0		ACA	1	Lys	AAA	1	Arg	AGA	0.034
Met	AUG	---		ACG	0.038		AAG	0.028		AGG	0
Val	GUU	0.918	Ala	GCU	1	Asp	GAU	1	Gly	GGU	1
	GUC	0		GCC	0.032		GAC	0.469		GGC	0.048
	GUA	1		GCA	0.468	Glu	GAA	1		GGA	0.012
	GUG	0.016		GCG	0.016		GAG	0.04		GGG	0