


# C.reinhardtii Complete

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:](#)

Complete genome analysis...

Sequence length: 77235    Number of protein genes: 69    Total codons: 25745

Amino acid	Codon	Number	Frequency per thousand												
Phe	UUU	869	33.8	Ser	UCU	489	19.0	Tyr	UAU	668	25.9	Cys	UGU	178	6.9
	UUC	450	17.5		UCC	57	2.2		UAC	247	9.6		UGC	21	0.8
Leu	UUA	2052	79.7		UCA	610	23.7	STOP	UAA	65	2.5	STOP	UGA	0	0.0
	UUG	99	3.8		UCG	98	3.8		UAG	4	0.2		UGG	336	13.1
Leu	CUU	385	15.0	Pro	CCU	384	14.9	His	CAU	272	10.6	Arg	CGU	877	34.1
	CUC	14	0.5		CCC	43	1.7		CAC	231	9.0		CGC	66	2.6
	CUA	182	7.1		CCA	584	22.7	Gln	CAA	1023	39.7		CGA	91	3.5
	CUG	47	1.8		CCG	55	2.1		CAG	81	3.1		CGG	6	0.2
Ile	AUU	1345	52.2	Thr	ACU	663	25.8	Asn	AAU	1186	46.1	Ser	AGU	424	16.5
	AUC	227	8.8		ACC	86	3.3		AAC	492	19.1		AGC	119	4.6
	AUA	182	7.1		ACA	863	33.5	Lys	AAA	1940	75.4	Arg	AGA	141	5.5
Met	AUG	552	21.4		ACG	95	3.7		AAG	122	4.7		AGG	19	0.7
Val	GUU	704	27.3	Ala	GCU	898	34.9	Asp	GAU	647	25.1	Gly	GGU	1160	45.1
	GUC	19	0.7		GCC	100	3.9		GAC	208	8.1		GGC	116	4.5
	GUA	691	26.8		GCA	527	20.5	Glu	GAA	1077	41.8		GGA	202	7.8
	GUG	96	3.7		GCG	78	3.0		GAG	91	3.5		GGG	91	3.5

0 unidentified codons.

Nucleotide frequency: A=27040 U=25306 G=12422 C=12467 X=0

GC Content: 32.23%    1st letter GC: 42.91%    2nd letter GC: 36.81%    3rd letter GC: 16.96%

## Weight table from reference set:

Amino acid   Codon   Weight											
Phe	UUU	1	Ser	UCU	0.802	Tyr	UAU	1	Cys	UGU	1
	UUC	0.518		UCC	0.093		UAC	0.37		UGC	0.118
Leu	UUA	1		UCA	1	STOP	UAA	---	STOP	UGA	---
	UUG	0.048		UCG	0.161		UAG	---	Trp	UGG	---
Leu	CUU	0.188	Pro	CCU	0.658	His	CAU	1	Arg	CGU	1
	CUC	0.007		CCC	0.074		CAC	0.849		CGC	0.075
	CUA	0.089		CCA	1	Gln	CAA	1		CGA	0.104
	CUG	0.023		CCG	0.094		CAG	0.079		CGG	0.007
ile	AUU	1	Thr	ACU	0.768	Asn	AAU	1	Ser	AGU	0.695
	AUC	0.169		ACC	0.1		AAC	0.415		AGC	0.195
	AUA	0.135		ACA	1	Lys	AAA	1	Arg	AGA	0.161
Met	AUG	---		ACG	0.11		AAG	0.063		AGG	0.022
Val	GUU	1	Ala	GCU	1	Asp	GAU	1	Gly	GGU	1
	GUC	0.027		GCC	0.111		GAC	0.321		GGC	0.1
	GUA	0.982		GCA	0.587	Glu	GAA	1		GGA	0.174
	GUG	0.136		GCG	0.087		GAG	0.084		GGG	0.078