

Table S4. Overall relative synonymous codon usage (RSCU) values in the coding sequences of 13 mitochondrial genes from different mitochondrial genome of five *Japanagallia* species.

ATP6									
Amino Acid	Codon	N	RSCU ^a	Amino Acid	Codon	N	RSCU ^a		
Ala	A	GCU*	4.8	2.46		UUC	4.6	0.78	
		GCC	0.8	0.41	Leu	L	UUA*	18.4	3.37
		GCA*	2	1.03			UUG	1.2	0.22
		GCG	0.2	0.1			CUU	5	0.91
Arg	R	CGU*	0.6	1.2		CUC	0.4	0.07	
		CGC	0	0		CUA*	7.6	1.39	
		CGA*	1.4	2.8	Pro	P	CCU*	4.8	2.09
		CGG	0	0			CCC	0.2	0.09
Asn	N	AAU*	9.6	1.26		CCA*	4.2	1.83	
		AAC	5.6	0.74		CCG	0	0	
Asp	D	GAU	0.4	0.8	Ser	S	UCU*	3.4	1.36
		GAC*	0.6	1.2			UCC	0.8	0.32
Cys	C	UGU	0.6	0.55		UCA*	6.8	2.72	
		UGC*	1.6	1.45		UCG	1	0.4	
Gln	Q	CAA*	2	2		AGU	0.6	0.24	
		CAG	0	0		AGC	0.2	0.08	
Clu	E	GAA*	4	2		AGA*	7.2	2.88	
		GAG	0	0		AGG	0	0	
Gly	G	GGU	1.6	0.71	Thr	T	ACU*	5.6	1.2
		GGC	0.6	0.27			ACC	1.8	0.39
		GGA*	4.8	2.13			ACA*	11.2	2.41
		GGG	2	0.89			ACG	0	0
His	H	CAU*	1.6	1.07	Tyr	Y	UAU*	3.8	1.23
		CAC	1.4	0.93			UAC	2.4	0.77
Ile	I	AUU*	17.2	1.58	Val	V	GUU*	2.4	1.17
		AUC	4.6	0.42			GUC	0	0
Lys	K	AAA*	7.8	1.81		GUA*	5.6	2.73	
		AAG	0.8	0.19		GUG	0.2	0.1	
Met	M	AUA*	27.4	1.81	Trp	W	UGA*	3.6	1.8
		AUG	2.8	0.19			UGG	0.4	0.2
Phe	F	UUU*	7.2	1.22					

ATP8

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU	0.2	0.8		UUC	0	0	
		GCC	0	0	Leu	L	UUA*	3.2	3.56
		GCA*	0.8	3.2			UUG	0.2	0.22
Arg	R	GCG	0	0		CUU*	1	1.11	
		CGU	0	0		CUC	0.2	0.22	
		CGC	0	0		CUA	0.8	0.89	
		CGA	0	0	Pro	P	CCU*	1.4	2.55
CGG	0	0		CCC		0.2	0.36		
Asn	N	AAU*	4.2	1.4		CCA*	0.6	1.09	
		AAC	1.8	0.6		CCG	0	0	
Asp	D	GAU*	0.2	2	Ser	S	UCU	0	0
		GAC	0	0			UCC	0.2	0.57
Cys	C	UGU	0	0		UCA*	1.4	4	
		UGC	0	0		UCG	0	0	
Gln	Q	CAA*	1	2		AGU	0	0	
		CAG	0	0		AGC	0.2	0.57	
Clu	E	GAA	0	0		AGA*	1	2.86	
		GAG	0	0		AGG	0	0	
Gly	G	GGU	0	0	Thr	T	ACU*	2	2.11
		GGC	0	0				ACC	0.2
		GGA	0	0		ACA*	1.6	1.68	
		GGG	0	0		ACG	0	0	
His	H	CAU	0	0	Tyr	Y	UAU	0.8	0.73
		CAC*	0.2	2				UAC*	1.4
Ile	I	AUU*	5	1.85	Val	V	GUU	0	0
		AUC	0.4	0.15				GUC	0
Lys	K	AAA*	5.8	1.93		GUA*	0.4	4	
		AAG	0.2	0.07		GUG	0	0	
Met	M	AUA*	6.6	2	Trp	W	UGA*	4	2
		AUG	0	0				UGG	0
Phe	F	UUU*	2.8	2					

COX1

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU*	11.2	1.93		UUC	11.6	0.59	
		GCC	1	0.17	Leu	L	UUA*	29.8	3.52
		GCA*	10.2	1.76		UUG	2.6	0.31	
	GCG	0.8	0.14	CUU		7	0.83		
Arg	R	CGU	1.4	0.7		CUC	1	0.12	
		CGC	0	0		CUA*	9.4	1.11	
		CGA*	6.6	3.3	Pro	P	CCU*	10.2	1.63
Asn	N	AAU*	15	1.46			CCC	2	0.32
		AAC	5.6	0.54			CCA*	12.4	1.98
Asp	D	GAU*	9.8	1.4		CCG	0.4	0.06	
		GAC	4.2	0.6	Ser	S	UCU*	13.4	2.11
Cys	C	UGU*	0.2	2			UCC	4.8	0.76
		UGC	0	0		UCA*	19.8	3.12	
Gln	Q	CAA*	7.2	1.8		UCG	1.4	0.22	
		CAG	0.8	0.2		AGU	0.8	0.13	
Clu	E	GAA*	8.2	1.82		AGC	0.8	0.13	
		GAG	0.8	0.18		AGA*	8.6	1.35	
Gly	G	GGU*	10.8	1.03		AGG	1.2	0.19	
		GGC	0.6	0.06	Thr	T	ACU*	15	1.79
		GGA*	23.8	2.27			ACC	4.4	0.52
	GGG	6.8	0.65			ACA*	13.4	1.6	
His	H	CAU*	10.8	1.35		ACG	0.8	0.1	
		CAC	5.2	0.65	Tyr	Y	UAU*	10.2	1.15
Ile	I	AUU*	42.4	1.56			UAC	7.6	0.85
		AUC	12	0.44	Val	V	GUU*	7.8	1.08
Lys	K	AAA*	9	1.76			GUC	1	0.14
		AAG	1.2	0.24		GUA*	18.6	2.58	
Met	M	AUA*	40.2	1.82		GUG	1.4	0.19	
		AUG	4	0.18	Trp	W	UGA*	12.8	1.71
Phe	F	UUU*	27.4	1.41			UGG	2.2	0.29

COX2

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU*	1.4	1.22		UUC	3.8	0.55	
		GCC	0.6	0.52	Leu	L	UUA*	14.8	4.11
		GCA*	2.2	1.91			UUG	0.2	0.06
Arg	R	GCG	0.4	0.35		CUU	1.4	0.39	
		CGU*	1.8	1.03		CUC	0.2	0.06	
		CGC	0.2	0.11	Pro	P	CUA*	4.8	1.33
		CGA*	4.8	2.74			CUG	0.2	0.06
Asn	N	CGG	0.2	0.11		CCU*	3.6	1.26	
		AAU*	6.2	1.02		CCC	1	0.35	
Asp	D	AAC	6	0.98		CCA*	6.4	2.25	
		GAU*	5	1.25	Ser	S	CCG	0.4	0.14
Cys	C	GAC	3	0.75			UCU*	4.8	1.78
		UGU	0.8	0.8		UCC	1.6	0.59	
Gln	Q	UGC*	1.2	1.2		UCA*	10.8	4	
		CAA*	7.6	1.9		UCG	0.8	0.3	
Clu	E	CAG	0.4	0.1		AGU	0.6	0.22	
		GAA*	10.2	1.85		AGC	0.2	0.07	
		GAG	0.8	0.15		AGA*	2.8	1.04	
Gly	G	GGU	1.2	0.6	Thr	T	AGG	0	0
		GGC	0	0			ACU*	4.4	1.26
		GGA*	6	3			ACC	1.2	0.34
His	H	GGG	0.8	0.4		ACA*	8.2	2.34	
		CAU*	4.4	1.63		ACG	0.2	0.06	
		CAC	1	0.37	Tyr	Y	UAU*	5.2	1.49
AUU*	22.4	1.6		UAC		1.8	0.51		
Ile	I	AUC	5.6	0.4	Val	V	GUU*	3.2	1.56
		AAA*	8.8	1.96			GUC	0.6	0.29
Lys	K	AAG	0.2	0.04		GUA*	3.8	1.85	
		AUA*	18.6	1.92		GUG	0.6	0.29	
Met	M	AUG	0.8	0.08	Trp	W	UGA*	5.8	2
		UUU*	10	1.45			UGG	0	0

COX3

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU*	1.2	1.09		UUC	9	0.83	
		GCC	0.4	0.36	Leu	L	UUA*	12.6	3.32
		GCA*	2.8	2.55			UUG	0.8	0.21
	GCG	0	0			CUU	3.6	0.95	
Arg	R	CGU*	0.8	1.07		CUC	0.4	0.11	
		CGC	0	0		CUA*	4.6	1.21	
		CGA*	2.2	2.93	Pro	P	CCU*	2.8	1.24
Asn	N	AAU*	8.6	1.3			CCC	0.6	0.27
		AAC	4.6	0.7			CCA*	5.6	2.49
Asp	D	GAU*	3	1.43		CCG	0	0	
		GAC	1.2	0.57	Ser	S	UCU*	5.2	1.33
Cys	C	UGU	0	0			UCC	1.6	0.41
		UGC	0	0		UCA*	15.8	4.05	
Gln	Q	CAA*	4.6	1.84		UCG	1	0.26	
		CAG	0.4	0.16		AGU	0.6	0.15	
Glu	E	GAA*	6	1.76		AGC	0.4	0.1	
		GAG	0.8	0.24		AGA*	6	1.54	
Gly	G	GGU*	4.2	1.04		AGG	0.6	0.15	
		GGC	0.6	0.15	Thr	T	ACU*	5.2	1.24
		GGA*	9.8	2.42			ACC	1.4	0.33
	GGG	1.6	0.4			ACA*	9.8	2.33	
His	H	CAU*	7.2	1.2		ACG	0.4	0.1	
		CAC	4.8	0.8	Tyr	Y	UAU*	5.6	1.3
Ile	I	AUU*	21.4	1.55			UAC	3	0.7
		AUC	6.2	0.45	Val	V	GUU*	3.2	1.14
Lys	K	AAA*	6.4	1.88			GUC	0.2	0.07
		AAG	0.4	0.12		GUA*	7.4	2.64	
Met	M	AUA*	24.2	1.82		GUG	0.4	0.14	
		AUG	2.4	0.18	Trp	W	UGA*	11	1.83
Phe	F	UUU*	12.6	1.17			UGG	1	0.17

CYTB

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU*	5	1.19		UUC	9.6	0.77	
		GCC	1.4	0.33	Leu	L	UUA*	27.6	3.55
		GCA*	9.8	2.33			UUG	1.4	0.18
Arg	R	GCG	0.6	0.14		CUU	4	0.52	
		CGU	0.8	0.47		CUC	0.8	0.1	
		CGC	0.2	0.12		CUA*	12.6	1.62	
		CGA*	4.8	2.82	Pro	P	CCU*	6.8	1.36
Asn	N	AAU*	12.8	1.14			CCC	1.2	0.24
Asp	D	AAC	9.6	0.86		CCA*	11.6	2.32	
		GAU*	6.4	1.33		CCG	0.4	0.08	
Cys	C	GAC	3.2	0.67	Ser	S	UCU*	6.4	1.78
		UGU*	1	1			UCC	2.2	0.61
Gln	Q	UGC*	1	1		UCA*	14.2	3.94	
		CAA*	4.8	2		UCG	0.4	0.11	
Clu	E	CAG	0	0		AGU	0.2	0.06	
		GAA*	6	2		AGC	0.2	0.06	
Gly	G	GAG	0	0		AGA*	4.6	1.28	
		GGU	3.2	0.56		AGG	0.6	0.17	
		GGC	0.4	0.07	Thr	T	ACU*	7.8	1.39
		GGA*	16	2.81			ACC	2.2	0.39
His	H	GGG	3.2	0.56		ACA*	11.8	2.11	
		CAU*	4.8	1.07		ACG	0.6	0.11	
Ile	I	CAC	4.2	0.93	Tyr	Y	UAU*	10	1.16
		AUU*	33.4	1.58			UAC	7.2	0.84
Lys	K	AUC	9	0.42	Val	V	GUU*	3.8	1.17
		AAA*	14.2	1.89			GUC	0.2	0.06
Met	M	AAG	0.8	0.11		GUA*	8.8	2.71	
		AUA*	32	1.93		GUG	0.2	0.06	
Phe	F	AUG	1.2	0.07	Trp	W	UGA*	11.4	1.93
		UUU*	15.2	1.23			UGG	0.4	0.07

ND1

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU*	2.6	3.47		UUC	2.2	0.09	
		GCC	0.2	0.27	Leu	L	UUA*	31.6	4.03
		GCA	0.2	0.27		UUG*	9.4	1.2	
		GCG	0	0		CUU	4.6	0.59	
				CUC		0.2	0.03		
Arg	R	CGU*	5.2	2.97		CUA	1.2	0.15	
		CGC	0.2	0.11		CUG	0	0	
		CGA	0.4	0.23	Pro	P	CCU*	6.2	2.7
		CGG	1.2	0.69		CCC	0.8	0.35	
Asn	N	AAU*	8.2	1.95		CCA	2.2	0.96	
		AAC	0.2	0.05		CCG	0	0	
Asp	D	GAU*	5.4	1.86	Ser	S	UCU*	18.8	3.82
		GAC	0.4	0.14		UCC	0.6	0.12	
Cys	C	UGU*	14	1.92		UCA*	5.4	1.1	
		UGC	0.6	0.08		UCG	0.2	0.04	
Gln	Q	CAA	2	0.8	AGU*	5.8	1.18		
		CAG*	3	1.2	AGC	0.2	0.04		
Clu	E	GAA	4	0.8	AGA*	7	1.42		
		GAG*	6	1.2	AGG	1.4	0.28		
Gly	G	GGU*	8.4	2.21	Thr	T	ACU*	5.2	3.71
		GGC	1.2	0.32		ACC	0	0	
		GGA	2.4	0.63		ACA	0	0	
		GGG	3.2	0.84		ACG	0.4	0.29	
His	H	CAU*	1.4	2	Tyr	Y	UAU*	23.8	1.93
		CAC	0	0		UAC	0.8	0.07	
Ile	I	AUU*	24.6	1.94	Val	V	GUU*	11.6	2.61
		AUC	0.8	0.06		GUC	1.2	0.27	
Lys	K	AAA	1.4	0.34		GUA	4	0.9	
		AAG*	6.8	1.66		GUG	1	0.22	
Met	M	AUA*	8	1.57	Trp	W	UGA*	5	1.28
		AUG	2.2	0.43		UGG	2.8	0.72	
Phe	F	UUU*	44.8	1.91					

ND2

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU*	3	1.71		UUC	4.6	0.5	
		GCC	0.6	0.34	Leu	L	UUA*	26.2	3.29
		GCA*	3.4	1.94			UUG	4.4	0.55
Arg	R	GCG	0	0		CUU	6	0.75	
		CGU*	1	2		CUC	1.2	0.15	
		CGC	0	0		CUA*	9.6	1.21	
		CGA*	1	2	Pro	P	CCU*	3	1.94
Asn	N	CGG	0	0			CCC	0.2	0.13
		AAU*	17.6	1.56			CCA*	2.4	1.55
Asp	D	AAC	5	0.44		CCG	0.6	0.39	
		GAU*	0.2	2	Ser	S	UCU*	8	1.52
Cys	C	GAC	0	0			UCC	1.8	0.34
		UGU*	0.8	1.33		UCA*	19.8	3.77	
Gln	Q	UGC	0.4	0.67		UCG	0.4	0.08	
		CAA*	5	1.92		AGU	3.4	0.65	
Clu	E	CAG	0.2	0.08		AGC	0.8	0.15	
		GAA*	7.6	1.9		AGA*	7.8	1.49	
		GAG	0.4	0.1	Thr	T	ACU*	6.6	1.81
Gly	G	GGU	2.2	0.94			ACC	0.8	0.22
		GGC	0.8	0.34			ACA*	7.2	1.97
		GGA*	3.2	1.36			ACG	0	0
His	H	GGG*	3.2	1.36		UAU*	6	1.22	
		CAU	0.4	0.67	Tyr	Y	UAC	3.8	0.78
Ile	I	CAC*	0.8	1.33			GUU*	4.4	1.69
		AUU*	31.2	1.68	Val	V	GUC	0.6	0.23
Lys	K	AUC	6	0.32			GUA*	5.4	2.08
		AAA*	16	1.84		GUG	0	0	
Met	M	AAG	1.4	0.16	Trp	W	UGA*	6.4	1.64
		AUA*	48.8	1.82			UGG	1.4	0.36
Phe	F	AUG	4.8	0.18					
		UUU*	13.8	1.5					

ND3

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU	0.2	0.33		UUC	4	0.75	
		GCC	0.2	0.33	Leu	L	UUA*	9.8	3.46
		GCA*	2	3.33			UUG	0.6	0.21
Arg	R	GCG	0	0		CUU	2	0.71	
		CGU*	0.6	2.4		CUC	0.2	0.07	
		CGC	0.2	0.8		CUA*	4.4	1.55	
		CGA	0.2	0.8	Pro	P	CUG	0	0
Asn	N	CGG	0	0			CCU	0.8	0.8
		AAU*	2.8	1.17		CCC	0	0	
Asp	D	AAC	2	0.83		CCA*	3.2	3.2	
		GAU*	1.4	1.4	Ser	S	CCG	0	0
Cys	C	GAC	0.6	0.6			UCU*	2	1.7
		UGU*	0.8	1.6		UCC	0	0	
Gln	Q	UGC	0.2	0.4		UCA*	3.6	3.06	
		CAA*	1.8	1.8		UCG*	1.2	1.02	
Clu	E	CAG	0.2	0.2		AGU	0.6	0.51	
		GAA*	2.8	1.87		AGC	0	0	
Gly	G	GAG	0.2	0.13		AGA*	1.8	1.53	
		GGU	0.4	0.53	Thr	T	AGG	0.2	0.17
		GGC	0	0			ACU*	2	1.33
		GGA*	2.4	3.2		ACC	0.8	0.53	
His	H	GGG	0.2	0.27		ACA*	3.2	2.13	
		CAU*	0.6	1.2		ACG	0	0	
Ile	I	CAC	0.4	0.8	Tyr	Y	UAU*	2.4	1.26
		AUU*	14	1.49			UAC	1.4	0.74
Lys	K	AUC	4.8	0.51	Val	V	GUU*	1.2	1.33
		AAA*	8	2			GUC	0.2	0.22
Met	M	AAG	0	0		GUA*	1.8	2	
		AUA*	12.6	1.97		GUG	0.4	0.44	
Phe	F	AUG	0.2	0.03	Trp	W	UGA*	2.6	1.73
		UUU*	6.6	1.25			UGG	0.4	0.27

ND4

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU*	7.4	3.44		UUC	3	0.08	
		GCC	0.2	0.09	Leu	L	UUA*	44	4.2
		GCA	0.8	0.37			UUG	9.8	0.94
		GCG	0.2	0.09		CUU	6	0.57	
Arg	R	CGU*	3	2.4		CUC	0.6	0.06	
		CGC	0.4	0.32		CUA	1.8	0.17	
		CGA	1.2	0.96	Pro	P	CCU*	8.2	2.98
		CGG	0.4	0.32			CCC	0.8	0.29
Asn	N	AAU*	12.8	1.94		CCA	1.8	0.65	
Asp	D	GAU*	4.8	1.78		CCG	0.2	0.07	
		GAC	0.6	0.22	Ser	S	UCU*	20.6	3.39
Cys	C	UGU*	15.8	1.8			UCC	0.4	0.07
		UGC	1.8	0.2		UCA	4.8	0.79	
Gln	Q	CAA*	2	1.33		UCG	1.2	0.2	
		CAG	1	0.67		AGU*	15.2	2.69	
Clu	E	GAA*	3.2	1.07		AGC	1	0.18	
		GAG	2.8	0.93		AGA	2.6	0.46	
Gly	G	GGU*	15.2	2.69		AGG	3.8	0.67	
		GGC	1	0.18	Thr	T	ACU*	5.2	2.54
		GGA	2.6	0.46			ACC	0.4	0.2
		GGG	3.8	0.67		ACA*	2.2	1.07	
His	H	CAU*	7.8	1.95		ACG	0.4	0.2	
		CAC	0.2	0.05	Tyr	Y	UAU*	33.8	1.85
Ile	I	AUU*	40	1.86			UAC	2.8	0.15
		AUC	3	0.14	Val	V	GUU*	12.8	2.37
Lys	K	AAA	3.2	0.86			GUC	0.8	0.15
		AAG*	4.2	1.14		GUA*	7	1.3	
Met	M	AUA*	19.4	1.4		GUG	1	0.19	
		AUG	8.4	0.6	Trp	W	UGA*	3.6	1.2
Phe	F	UUU*	71.4	1.92			UGG	2.4	0.8

ND4L

Amino Acid		Codon	N	RSCU ^a	Amino Acid		Codon	N	RSCU ^a
Ala	A	GCU*	1	4	Leu	L	UUC	0.2	0.04
		GCC	0	0			UUA*	11	3.27
		GCA	0	0			UUG*	3.6	1.07
		GCG	0	0			CUU*	4.4	1.31
Arg	R	CGU*	2	4	Pro	P	CUC	0	0
		CGC	0	0			CUA	1.2	0.36
		CGA	0	0			CUG	0	0
		CGG	0	0			CCU	0	0
Asn	N	AAU*	2	2	Ser	S	CCC	0	0
		AAC	0	0			CCA	0	0
Asp	D	GAU*	1.4	1.4	Ser	S	CCG	0	0
		GAC	0.6	0.6			UCU*	2	2.29
Cys	C	UGU*	3.8	1.9	Thr	T	UCC	0	0
		UGC	0.2	0.1			UCA*	2.2	2.51
Gln	Q	CAA	0	0	Tyr	Y	UCG	0	0
		CAG	0	0			AGU*	2.2	2.51
Clu	E	GAA*	1.2	1.2	Val	V	AGC	0.2	0.23
		GAG	0.8	0.8			AGA	0	0
Gly	G	GGU*	2.6	2.48	Val	V	AGG	0.4	0.46
		GGC	0.2	0.19			ACU*	1	4
		GGA	1	0.95			ACC	0	0
		GGG	0.4	0.38			ACA	0	0
His	H	CAU*	1.8	1.8	Tyr	Y	ACG	0	0
		CAC	0.2	0.2			UAU*	7.8	2
Ile	I	AUU*	9	1.96	Val	V	UAC	0	0
		AUC	0.2	0.04			GUU*	4.6	3.07
Lys	K	AAA	0.2	0.4	Trp	W	GUC	0.2	0.13
		AAG*	0.8	1.6			GUA	1.2	0.8
Met	M	AUA*	5.6	1.27	Trp	W	GUG	0	0
		AUG	3.2	0.73			UGA*	0.8	1.6
Phe	F	UUU*	10.4	1.96			UGG	0.2	0.4

ND5

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU*	8.2	2.73		UUC	3.4	0.09	
		GCC	0.6	0.2	Leu	L	UUA*	57	4.09
		GCA*	3.2	1.07			UUG	13.8	0.99
Arg	R	CGU*	3	2.4		CUU	9.2	0.66	
		CGC	0	0		CUC	0.2	0.01	
		CGA*	1.8	1.44	Pro	P	CCU*	4.6	2.3
		CGG	0.2	0.16			CCC	0.4	0.2
Asn	N	AAU*	23.8	1.89		CCA*	2.8	1.4	
Asp	D	GAU*	11	1.77		CCG	0.2	0.1	
		GAC	1.4	0.23	Ser	S	UCU*	30.4	3.45
Cys	C	UGU*	14	1.69			UCC	2.4	0.27
		UGC	2.6	0.31		UCA*	8.8	1	
Gln	Q	CAA*	3.2	1.03		UCG	1	0.11	
		CAG	3	0.97		AGU*	13	1.48	
Clu	E	GAA*	4.4	1.57		AGC	0.6	0.07	
		GAG	1.2	0.43		AGA*	9.6	1.09	
Gly	G	GGU*	19.8	2.68		AGG	4.6	0.52	
		GGC	0.4	0.05	Thr	T	ACU*	11.2	3.11
		GGA	3.4	0.46			ACC	1.2	0.33
		GGG	6	0.81		ACA	1.6	0.44	
His	H	CAU*	5	1.92		ACG	0.4	0.11	
		CAC	0.2	0.08	Tyr	Y	UAU*	50.2	1.82
Ile	I	AUU*	43.6	1.92			UAC	5	0.18
		AUC	1.8	0.08	Val	V	GUU*	17.4	2.58
Lys	K	AAA*	4.6	1.12			GUC	1	0.15
		AAG	3.6	0.88		GUA*	7.4	1.1	
Met	M	AUA*	28	1.51		GUG	1.2	0.18	
		AUG	9.2	0.49	Trp	W	UGA*	6.8	1.36
Phe	F	UUU*	76.4	1.91			UGG	3.2	0.64

ND6

Amino Acid	Codon	N	RSCU^a	Amino Acid	Codon	N	RSCU^a		
Ala	A	GCU	0.4	0.57		UUC	1.6	0.48	
		GCC	0	0	Leu	L	UUA*	12.4	3.51
		GCA*	2.2	3.14			UUG	1	0.28
Arg	R	GCG	0.2	0.29			CUU	2.6	0.74
		CGU	0	0		CUC	0.4	0.11	
		CGC	0.2	0.8		CUA*	4.8	1.36	
		CGA*	0.6	2.4	Pro	P	CCU*	1.2	2.18
Asn	N	CGG	0.2	0.8			CCC	0.4	0.73
		AAU*	2.4	1.2			CCA*	0.6	1.09
Asp	D	AAC	1.6	0.8		CCG	0	0	
		GAU*	0.8	1.33	Ser	S	UCU*	2.2	1.24
Cys	C	GAC	0.4	0.67			UCC	0.6	0.34
		UGU	0	0			UCA*	7	3.94
Gln	Q	UGC*	0.2	2		UCG	0.4	0.23	
		CAA*	3.4	1.89		AGU	0.2	0.11	
Clu	E	CAG	0.2	0.11		AGC	0.2	0.11	
		GAA*	10	1.92		AGA*	3.6	2.03	
		GAG	0.4	0.08	Thr	T	AGG	0	0
Gly	G	GGU	0.4	0.4			ACU*	4	1.31
		GGC	0.2	0.2			ACC	1.8	0.59
		GGA*	3.2	3.2			ACA*	6	1.97
His	H	GGG	0.2	0.2		ACG	0.4	0.13	
		CAU*	1.6	1.6	Tyr	Y	UAU*	2.4	1.14
Ile	I	CAC	0.4	0.4			UAC	1.8	0.86
		AUU*	20.8	1.76	Val	V	GUU*	1.4	1.65
Lys	K	AUC	2.8	0.24			GUC	0	0
		AAA*	14.4	1.92		GUA*	1.8	2.12	
Met	M	AAG	0.6	0.08		GUG	0.2	0.24	
		AUA*	28.4	1.88	Trp	W	UGA*	1	2
Phe	F	AUG	1.8	0.12			UGG	0	0
		UUU*	5	1.52					

^a mean values of RSCU based on the synonymous codon usage frequencies; N: Total number of preferred codon; *RSCU>1; Yellow colour represents over-represented codon (RSCU>1.6).