

### *Physcomitrella patens* codon usage

< 1.00: under represented

> 1.00: over represented

<b>Phe</b> UUU 0.96	<b>Ser</b> UCU 1.16	<b>Tyr</b> UAU 0.94	<b>Cys</b> UGU 0.89
UUC 1.04	UCC 1.00	UAC 1.06	UGC 1.11
<b>Leu</b> UUA 0.52	UCA 1.07	<b>STP</b> UAA 0.65	<b>STP</b> UGA 1.77
UUG 1.41	UCG 0.83	<b>STP</b> UAG 0.58	<b>Trp</b> UGG 1.00
CUU 1.23	<b>Pro</b> CCU 1.18	<b>His</b> CAU 1.05	<b>Arg</b> CGU 0.78
CUC 1.12	CCC 0.88	CAC 0.95	CGC 0.84
CUA 0.53	<b>CCA</b> 1.22	<b>Gln</b> CAA 1.07	CGA 1.06
CUG 1.20	CCG 0.72	CAG 0.93	CGG 0.80
<b>Ile</b> AUU 1.29	<b>Thr</b> ACU 1.08	<b>Asn</b> AAU 1.02	<b>Ser</b> AGU 0.83
AUC 1.18	ACC 0.97	AAC 0.98	AGC 1.11
AUA 0.54	<b>ACA</b> 1.14	<b>Lys</b> AAA 0.85	<b>Arg</b> AGA 1.33
<b>Met</b> AUG 1.00	ACG 0.80	<b>AAG</b> 1.15	AGG 1.19
<b>Val</b> GUU 1.18	<b>Ala</b> GCU 1.23	<b>Asp</b> GAU 1.10	<b>Gly</b> GGU 0.94
GUC 0.85	GCC 0.82	GAC 0.90	GGC 0.94
GUA 0.60	GCA 1.19	<b>Glu</b> GAA 0.98	<b>GGA</b> 1.31
<b>GUG</b> 1.37	GCG 0.76	<b>GAG</b> 1.02	GGG 0.82

915239 codons in Average of genes (used Universal Genetic code)

Compiled using CodonW from 7537 predicted ORFs

ORF prediction was done with a *Physcomitrella* specific ESTscan model based on 237 full-length CDS

Optimal codons are shown in **bold type**