

amino acid	codon	Genome	circular	% of genome	abs diff	linear	% of genome	abs diff	pATC58	% of genome	abs diff	pTIC58	% of genome	abs diff	T-DNA	% of genome	abs diff	AT island	% of genome	abs diff	vir genes	% of genome	abs diff
Ala	GCU	0.39	0.37	94.87	0.02	0.36	92.31	0.03	0.56	143.59	0.17	0.63	161.54	0.24	1.02	261.54	0.63	0.76	194.87	0.37	0.85	217.95	0.46
Ala	GCC	1.78	1.84	103.37	0.06	1.81	101.69	0.03	1.45	81.46	0.33	1.38	77.53	0.40	1.11	62.36	0.67	1.14	64.04	0.64	1.13	63.48	0.65
Ala	GCA	0.52	0.47	90.38	0.05	0.51	98.08	0.01	0.75	144.23	0.23	0.7	134.62	0.18	0.99	190.38	0.47	0.93	178.85	0.41	0.86	165.38	0.34
Ala	GCG	1.31	1.32	100.76	0.01	1.33	101.53	0.02	1.24	94.86	0.07	1.29	98.47	0.02	0.87	66.41	0.44	1.17	89.31	0.14	1.17	89.31	0.14
Arg	CGU	1.04	1.1	105.37	0.06	0.99	95.19	0.02	0.97	93.27	0.07	0.92	100.00	0.00	1.04	100.00	0.00	0.98	84.53	0.16	1	96.15	0.04
Arg	CCC	2.94	3.16	107.48	0.22	2.92	99.32	0.02	2.26	76.87	0.68	2.14	72.79	0.80	1.02	34.69	1.92	1.69	57.48	1.25	1.72	58.50	1.22
Arg	CGA	0.29	0.2	68.97	0.09	0.27	93.10	0.02	0.66	227.59	0.37	0.67	231.03	0.38	1.04	358.62	0.75	1.17	403.45	0.88	0.9	310.34	0.61
Arg	CGG	1.25	1.08	93.91	0.07	1.22	113.91	0.07	1.22	106.09	0.07	1.31	113.91	0.16	1.05	91.30	0.10	1.12	97.39	0.03	1.26	109.57	0.11
Arg	AGA	0.21	0.16	76.19	0.05	0.22	104.76	0.01	0.35	166.67	0.14	0.41	195.24	0.20	0.96	457.14	0.75	0.55	261.90	0.34	0.53	252.38	0.32
Arg	AGG	0.37	0.3	81.08	0.07	0.39	105.41	0.02	0.54	145.95	0.17	0.55	148.85	0.18	0.89	240.54	0.52	0.59	159.46	0.22	0.58	156.76	0.21
Asn	AAU	0.87	0.86	98.85	0.01	0.89	102.30	0.02	0.83	95.40	0.04	0.85	97.70	0.02	1.04	119.54	0.17	0.76	87.36	0.11	1.06	121.84	0.19
Asn	AAC	1.13	1.14	100.88	0.01	1.11	98.23	0.02	1.17	103.54	0.04	1.15	101.77	0.02	0.96	84.96	0.17	1.24	109.73	0.11	0.94	83.19	0.19
Asp	GAU	1.01	0.99	98.02	0.02	1.04	102.97	0.03	0.99	98.02	0.02	0.96	95.05	0.05	1.21	119.80	0.20	0.99	98.02	0.02	1.08	106.93	0.07
Asp	GAC	0.99	1.01	102.02	0.02	0.96	96.97	0.03	1.01	102.02	0.02	1.04	105.05	0.05	0.79	78.80	0.20	1.01	102.02	0.02	0.92	92.93	0.07
Cys	UGU	0.41	0.38	92.68	0.03	0.4	97.56	0.01	0.47	114.63	0.06	0.62	151.22	0.21	0.79	192.68	0.38	0.8	195.12	0.39	0.67	163.41	0.26
Cys	UGC	1.59	1.62	101.89	0.03	1.6	100.63	0.01	1.53	96.23	0.06	1.38	86.79	0.21	1.21	76.10	0.38	1.2	75.47	0.39	1.33	83.65	0.26
Gln	CAA	0.35	0.29	82.86	0.06	0.35	100.00	0.00	0.55	157.14	0.20	0.65	185.71	0.30	1.04	297.14	0.69	0.84	240.00	0.49	0.95	271.43	0.6
Gln	CAG	1.65	1.71	103.64	0.06	1.65	100.00	0.00	1.45	87.88	0.20	1.35	81.82	0.30	0.96	58.18	0.69	1.16	70.30	0.49	1.05	63.64	0.6
Glu	GAA	1.13	1.16	102.65	0.03	1.12	99.12	0.01	1.09	87.61	0.14	0.96	88.96	0.17	1.15	101.77	0.02	1	88.50	0.13	1.04	92.04	0.09
Glu	GAG	0.87	0.84	96.55	0.03	0.88	101.15	0.01	1.01	116.09	0.14	1.04	119.54	0.17	0.85	97.70	0.02	1	114.94	0.13	0.96	110.34	0.09
Gly	GGU	0.95	0.86	101.18	0.01	0.83	97.65	0.02	0.87	102.35	0.02	0.8	94.12	0.05	0.9	105.88	0.05	0.85	100.00	0.00	0.87	102.35	0.02
Gly	GGC	2.42	2.54	104.96	0.12	2.43	100.41	0.01	1.94	80.17	0.48	1.81	74.79	0.61	1.19	49.17	1.23	1.56	64.46	0.86	1.6	66.12	0.82
Gly	CGA	0.33	0.26	78.79	0.07	0.32	96.97	0.01	0.61	184.85	0.28	0.74	224.24	0.41	1.19	360.61	0.86	0.88	266.67	0.55	0.8	242.42	0.47
Gly	GGG	0.41	0.35	85.37	0.06	0.42	102.44	0.01	0.57	139.02	0.16	0.66	160.98	0.25	0.72	175.61	0.31	0.71	173.17	0.30	0.74	180.49	0.33
His	CAU	1.13	1.13	100.00	0.00	1.16	102.65	0.03	1.05	92.92	0.08	1.06	93.81	0.07	1.19	105.31	0.06	1.06	93.81	0.07	1.09	96.46	0.04
His	CAC	0.87	0.87	100.00	0.00	0.84	108.05	0.03	0.95	109.20	0.08	0.94	108.05	0.07	0.81	93.10	0.06	0.94	108.05	0.07	0.91	104.60	0.04
Ile	AUU	0.66	0.65	98.48	0.01	0.66	100.00	0.00	0.76	115.15	0.10	0.72	109.09	0.06	1.18	178.79	0.52	0.98	148.48	0.32	1.04	157.58	0.38
Ile	AUC	2.18	2.23	102.29	0.05	2.18	90.37	0.21	1.97	90.37	0.21	1.19	72.37	0.21	1.19	54.59	0.99	1.58	72.48	0.60	1.47	67.43	0.71
Ile	AUA	0.16	0.13	81.25	0.03	0.16	100.00	0.00	0.27	168.75	0.11	0.31	193.75	0.15	0.64	400.00	0.48	0.44	275.00	0.28	0.49	306.25	0.33
Leu	UUA	0.06	0.04	66.67	0.02	0.05	83.33	0.01	0.13	216.67	0.07	0.19	316.67	0.13	0.55	916.67	0.49	0.34	566.67	0.26	0.34	566.67	0.28
Leu	UUG	0.51	0.45	88.24	0.06	0.49	96.08	0.02	0.77	150.98	0.26	0.84	164.71	0.33	1.15	225.49	0.64	1.18	231.37	0.67	1.2	235.29	0.69
Leu	CUU	1.09	1.03	94.50	0.06	1.11	101.83	0.02	1.23	112.84	0.14	1.13	103.67	0.04	1.23	112.84	0.14	1	91.74	0.09	1.3	119.27	0.21
Leu	CUC	1.62	1.64	101.23	0.02	1.64	100.00	0.00	1.69	104.32	0.07	1.16	104.32	0.07	1.16	71.60	0.46	1.32	81.48	0.30	1.33	112.20	0.29
Leu	CUA	0.11	0.08	72.73	0.03	0.1	90.91	0.01	0.24	218.18	0.13	0.26	236.36	0.15	0.54	490.91	0.43	0.62	563.64	0.51	0.44	400.00	0.33
Leu	CUG	2.62	2.76	105.34	0.14	2.63	100.38	0.01	2.1	72.14	0.73	1.89	72.14	0.73	1.39	53.05	1.23	1.56	59.54	1.06	1.39	53.05	1.23
Lys	AAA	0.6	0.54	90.00	0.06	0.65	108.33	0.05	0.71	118.33	0.11	0.72	120.00	0.12	1.05	175.00	0.45	1	166.67	0.40	0.93	155.00	0.33
Lys	AAG	1.4	1.46	104.29	0.06	1.35	96.43	0.05	1.29	92.14	0.11	1.28	91.43	0.12	0.95	67.86	0.45	1	71.43	0.40	1.07	76.43	0.33
Met	AUG	1	1	100.00	0.00	1	100.00	0.00	1	100.00	0.00	1	100.00	0.00	1	100.00	0.00	1	100.00	0.00	1	100.00	0
Phe	UUU	0.56	0.52	92.86	0.04	0.56	100.00	0.00	0.71	126.79	0.15	0.67	119.64	0.11	0.93	166.07	0.37	0.86	153.57	0.30	0.98	175.00	0.42
Phe	UUC	1.44	1.48	102.78	0.04	1.44	100.00	0.00	1.29	89.58	0.15	1.33	79.17	0.11	1.07	74.31	0.37	1.14	79.17	0.30	1.02	70.83	0.42
Pro	CCU	0.42	0.4	95.24	0.02	0.38	90.48	0.04	0.57	135.71	0.15	0.61	145.24	0.19	0.92	219.05	0.50	0.78	185.71	0.36	0.81	192.86	0.39
Pro	CCC	1.06	1.08	101.89	0.02	1.07	100.94	0.01	0.94	88.68	0.12	0.96	90.57	0.10	0.86	81.13	0.20	1	94.34	0.06	0.88	83.02	0.18
Pro	CCA	0.33	0.24	72.73	0.09	0.33	100.00	0.00	0.62	187.88	0.29	0.7	212.12	0.37	1.29	390.91	0.96	0.91	275.76	0.58	0.83	251.52	0.5
Pro	CCG	2.2	2.28	103.64	0.08	2.22	100.91	0.02	1.87	78.64	0.47	1.73	78.64	0.47	0.93	42.27	1.27	1.3	59.09	0.90	1.48	67.27	0.72
Ser	UCU	0.34	0.32	94.12	0.02	0.31	91.18	0.03	0.52	152.94	0.18	0.61	179.41	0.27	1.08	317.65	0.74	0.71	208.82	0.37	0.74	217.65	0.4
Ser	UCC	1.76	1.89	107.39	0.13	1.77	100.57	0.01	1.3	73.86	0.46	1.18	67.05	0.58	1.16	65.91	0.60	0.91	51.70	0.85	0.94	53.41	0.82
Ser	UCA	0.38	0.31	81.58	0.07	0.36	94.74	0.02	0.68	178.95	0.30	0.63	165.79	0.25	1.07	281.58	0.69	0.92	242.11	0.54	0.77	202.63	0.39
Ser	UCG	1.77	1.84	103.95	0.07	1.73	97.74	0.04	1.64	92.66	0.13	1.59	89.83	0.18	1.08	74.43	0.98	1.33	75.14	0.44	1.36	76.84	0.41
Ser	AGU	0.29	0.22	75.86	0.07	0.3	103.45	0.01	0.47	162.07	0.18	0.52	179.31	0.23	0.64	220.69	0.35	0.84	289.66	0.55	0.82	282.76	0.53
Ser	AGC	1.47	1.43	97.28	0.04	1.54	104.76	0.07	1.4	95.24	0.07	1.47	100.00	0.00	1.26	85.71	0.21	1.29	87.76	0.18	1.37	93.20	0.1
TER	UAA	0.75	0.78	104.00	0.03	0.71	94.67	0.04	0.75	100.00	0.00	0.68	90.67	0.07	1.31	174.67	0.56	0.88	117.33	0.13	0.7	93.33	0.05
TER	UAG	0.36	0.31	86.11	0.05	0.36	100.00	0.00	0.5	138.89	0.14	0.61	169.44	0.25	0.75	208.33	0.39	0.75	208.33	0.39	0.77	213.89	0.41
TER	UGA	1.89	1.91	101.06	0.02	1.92	101.59	0.03	1.75	92.59	0.14	1.71	90.48	0.18	0.94	74.59	0.95	1.38	73.02	0.51	1.53	80.95	0.36
Thr	ACU	0.22	0.19	86.36	0.03	0.19	86.36	0.03	0.39	177.27	0.17	0.48	218.18	0.26	1.04	472.73	0.82	0.67	304.55	0.45			