

Table 5. Annotation of genes and protein coding regions in Monterey Bay BAC clone EB000-45B06

#	Nucleotide range	Dir.	Putative function	Closest BLASTP hit (E-value)	
1	1 - 2655	+	23S rRNA (incomplete)		
2	3049 - 3642	+	Predicted dephospho-CoA kinase	O69082 (5e-39)	gamma
3	3802 - 6513	-	Predicted preprotein translocase subunit SecA	ZP_00067433.1 (0.0)	gamma
4	6556 - 7473	-	Predicted UDP-3-O-acyl-N-acetylglucosamine deacetylase	NP_253096.1 (1e-104)	gamma
5	7488 - 8210	-	Predicted 23S rRNA methylases	NP_290810.1 (2e-25)	gamma
6	8207 - 9694	-	Predicted exoribonuclease R	AAO90604.1 (3e-92)	gamma
7	9766 - 12375	-	TonB-dependent receptor	NP_421988.1 (3e-53)	alpha
8	12457 - 12858	-	Hypothetical protein	-	-
9	12924 - 15131	-	Predicted outer membrane receptor proteins, mostly Fe transport	NP_638006.1 (7e-51)	gamma
10	15461 - 16516	-	Predicted Zn-dependent alcohol dehydrogenase	AAG10028.1 (1e-65)	gamma
11	16595 - 17989	+	Predicted amidohydrolase	NP_638717.1 (1e-135)	gamma
12	17989 - 19254	+	Predicted amidohydrolase	NP_420780.1 (3e-30)	alpha
13	19260 - 19335	-	tRNA Thr (TGT anticodon)		
14	19358 - 19915	-	Predicted peptide methionine sulfoxide reductase	NP_439944.1 (8e-61)	cyanobacteria
15	19920 - 20669	-	Predicted biotin-(acetyl-CoA carboxylase) ligase	NP_252970.1 (2e-20)	gamma
16	20720 - 20803	+	tRNA Tyr (GTA anticodon)		
17	20924 - 20998	+	tRNA Thr (GGT anticodon)		
18	21036 - 22226	+	Predicted GTPases - translation elongation factor Tu (EF-Tu)	ZP_00002218.1 (1e-173)	beta
19	22297 - 22372	+	tRNA Trp (CCA anticodon)		
20	22403 - 22765	+	Predicted preprotein translocase subunit SecE	NP_252966.1 (6e-18)	gamma
21	22770 - 23297	+	Predicted transcription antiterminator NusG	NP_457922.1 (6e-60)	gamma
22	23297 - 23725	+	Ribosomal protein L11	NP_282996.1 (3e-51)	beta
23	23722 - 24414	+	Ribosomal protein L1	NP_252963.1 (2e-59)	gamma
24	24528 - 25106	+	Ribosomal protein L10	ZP_00067854.1 (2e-45)	gamma
25	25125 - 25505	+	Ribosomal protein L7/L12	ZP_00067853.1 (3e-28)	gamma
26	25545 - 29606	+	DNA-directed RNA polymerase beta subunit (RpoB)	ZP_00067852.1 (0.0)	gamma
27	29616 - 33797	+	DNA-directed RNA polymerase beta' subunit (RpoC)	NP_252959.1 (0.0)	gamma
28	33853 - 34224	+	Ribosomal protein S12	NP_715866.1 (9e-56)	gamma
29	34227 - 34697	+	Ribosomal protein S7	ZP_00090899.1 (4e-59)	gamma
30	34726 - 36828	+	Predicted GTPases - translation elongation factor G (EF-G)	ZP_00067848.1 (0.0)	gamma
31	36954 - 37265	+	Ribosomal protein S10	NP_232225.1 (3e-38)	gamma
32	37359 - 37961	+	Ribosomal protein L3	AAO89796.1 (4e-51)	gamma
33	37958 - 38572	+	Ribosomal protein L4	ZP_00067991.1 (4e-62)	gamma
34	38535 - 38861	+	Ribosomal protein L23	ZP_00090905.1 (5e-17)	gamma
35	38864 - 39691	+	Ribosomal protein L2	ZP_00067989.1 (6e-98)	gamma
36	40050 - 40304	+	Ribosomal protein L22	ZP_00067987.1 (1e-21)	gamma
37	40495 - 40962	+	Ribosomal protein S3	NP_438942.1 (2e-57)	gamma
38	40968 - 41378	+	Ribosomal protein L16/L10E	NP_709101.1 (3e-57)	gamma
39	41872 - 42240	+	Ribosomal protein L14	NP_636291.1 (1e-48)	gamma
40	42243 - 42572	+	Ribosomal protein L24	ZP_00067982.1 (5e-11)	gamma
41	42573 - 43112	+	Ribosomal protein L5	NP_715883.1 (9e-62)	gamma
42	43122 - 43427	+	Ribosomal protein S14	NP_790486.1 (5e-29)	gamma
43	43432 - 43827	+	Ribosomal protein S8	ZP_00004334.1 (2e-31)	alpha
44	43793 - 44371	+	Ribosomal protein L6	ZP_00067979.1 (2e-53)	gamma
45	44375 - 44722	+	Ribosomal protein L18	NP_742636.1 (2e-29)	gamma
46	44730 - 45239	+	Ribosomal protein S5	ZP_00067978.1 (2e-56)	gamma
47	45426 - 45932	+	Ribosomal protein L15	NP_438956.1 (8e-33)	gamma
48	45936 - 47237	+	Predicted preprotein translocase subunit SecY	ZP_00125956.1 (1e-150)	gamma
49	47359 - 47718	+	Ribosomal protein S13	ZP_00084778.1 (1e-38)	gamma
50	47720 - 48097	+	Ribosomal protein S11	NP_252930.1 (1e-43)	gamma
51	48109 - 48732	+	Ribosomal protein S4	NP_796660.1 (4e-78)	gamma
52	48866 - 49717	+	DNA-directed RNA polymerase alpha subunit (RpoA)	ZP_00067973.1 (1e-88)	gamma
53	49722 - 50135	+	Ribosomal protein L17	NP_759717.1 (2e-39)	gamma
54	50137 - 52953	-	Predicted excinuclease ATPase subunit A	NP_742649.1 (0.0)	gamma
55	53024 - 53464	+	Predicted single-stranded DNA-binding protein	AAO89829.1 (2e-43)	gamma
56	53476 - 54345	+	Predicted enoyl-CoA hydratase/carnithine racemase	NP_772244.1 (4e-81)	alpha
57	54359 - 55438	+	Predicted NADH:flavin oxidoreductase	ZP_00086634.1 (1e-103)	gamma
58	55435 - 56643	-	Predicted 3-oxoacyl-(acyl-carrier-protein) synthase	ZP_00067995.1 (1e-137)	gamma
59	56643 - 57167	-	Predicted 3-hydroxymyristoyl/3-hydroxydecanoyl-ACP dehydratase	NP_250301.1 (2e-53)	gamma
60	57164 - 58114	-	Predicted geranylgeranyl pyrophosphate synthase	ZP_00068004.1 (2e-48)	gamma
61	58204 - 58524	+	Ribosomal protein L21	ZP_00068005.1 (5e-17)	gamma
62	58795 - 59352	+	Predicted GTPase protein	AAO89940.1 (2e-41)	gamma
63	59511 - 59816	+	Predicted GTPase protein	NP_439038.1 (8e-10)	gamma
64	60188 - 61108	-	Predicted TonB-dependent receptor	NP_796547.1 (2e-16)	gamma