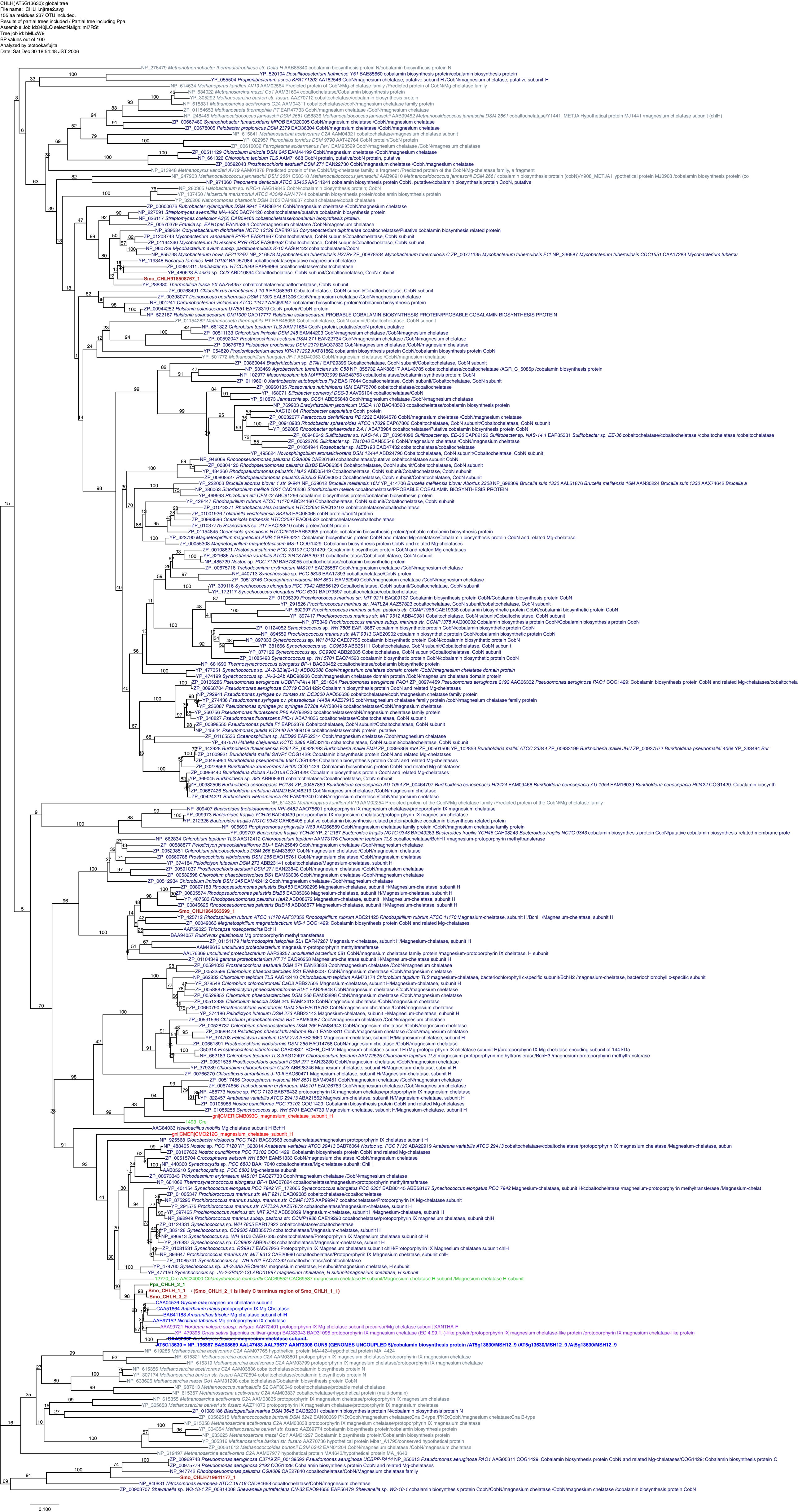
CHLH(AT5G13630): global tree
File name: CHLH.njtree2.svg
155 aa residues 237 OTU included.
Results of partial trees included / Partial tree including Ppa.
Assemble Job Id:840jLQ selectNalign: ml7RSt
Tree job id: bMLxW9
BP values out of 100
Analyzed by :sotooka/fujita
Date: Sat Dec 30 18:54:48 JST 2006
NP_276479 Methanothermobacter thermautotrophicus str. Delta H AAB85840 cobalamin biosynthesis protein N/Cobalamin biosynthesis protein N
YP_520104 Desulfitobacterium hafniense Y51 BAE85660 cobalamin biosynthesis protein/cobalamin biosynthesis protein
YP_055504 Propionibacterium acnes KPA171202 AAT82546 CobN/magnesium chelatase, putative subunit H /CobN/magnesium chelatase, putative subunit H
NP_614634 Methanopyrus kandleri AV19 AAM02564 Predicted protein of CobN/Mg-chelatase family /Predicted protein of CobN/Mg-chelatase family
NP_634022 Methanosarcina mazei Go1 AAM31694 cobaltochelatase/Cobalamin biosynthesis protein
YP_305292 Methanosarcina barkeri str. fusaro AAZ70712 cobaltochelatase/cobalamin biosynthesis protein
NP_615831 Methanosarcina acetivorans C2A AAM04311 cobaltochelatase/cobN/magnesium chelatase family protein
ZP_01154653 Methanosaeta thermophila PT EAR47733 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_248445 Methanocaldococcus jannaschii DSM 2661 Q58836 Methanocaldococcus jannaschii AAB99452 Methanocaldococcus jannaschii DSM 2661 cobaltochelatase/Y1441_METJA Hypothetical protein MJ1441 /magnesium chelatase subunit (chlH)
ZP_00667480 Syntrophobacter fumaroxidans MPOB EAQ00005 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00678005 Pelobacter propionicus DSM 2379 EAO36304 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_615841 Methanosarcina acetivorans C2A AAM04321 cobaltochelatase/magnesium chelatase subunit
YP_022957 Picrophilus torridus DSM 9790 AAT42764 CobN protein/CobN protein
ZP_01610032 Ferroplasma acidarmanus Fer1 EAM93529 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00511129 Chlorobium limicola DSM 245 EAM44199 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_661326 Chlorobium tepidum TLS AAM71668 CobN protein, putative/cobN protein, putative
ZP_00592043 Prosthecochloris aestuarii DSM 271 EAN22730 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_613948 Methanopyrus kandleri AV19 AAM01878 Predicted protein of the CobN/Mg-chelatase family, a fragment /Predicted protein of the CobN/Mg-chelatase family, a fragment
NP_247903 Methanocaldococcus jannaschii DSM 2661 Q58318 Methanocaldococcus jannaschii AAB98910 Methanocaldococcus jannaschii DSM 2661 cobalamin biosynthesis protein (cobN)/Y908_METJA Hypothetical protein MJ0908 /cobalamin biosynthesis protein (co
NP_971360 Treponema denticola ATCC 35405 AAS11241 cobalamin biosynthesis protein CobN, putative/cobalamin biosynthesis protein CobN, putative
NP_280365 Halobacterium sp. NRC-1 AAG19845 CobN/cobalamin biosynthesis protein; CobN
YP_137450 Haloarcula marismortui ATCC 43049 AAV47744 cobalamin biosynthesis protein/cobalamin biosynthesis protein
YP_326206 Natronomonas pharaonis DSM 2160 CAI48637 cobalt chelatase/cobalt chelatase
ZP_00600676 Rubrobacter xylanophilus DSM 9941 EAN36244 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_827591 Streptomyces avermitilis MA--4later BAC74126 cobaltochelatase/putative cobalamin biosynthesis protein
NP_626117 Streptomyces coelicolor A3(2) CAB59465 cobaltochelatase/cobalamin biosynthesis protein.
ZP_00570379 Frankia sp. EAN1pec EAN15364 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_939584 Corynebacterium diphtheriae NCTC 13129 CAE49755 Corynebacterium diphtheriae cobaltochelatase/Putative cobalamin biosynthesis related protein
ZP_01208743 Mycobacterium vanbaalenii PYR-1 EAS21667 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
ZP_01194340 Mycobacterium flavescens PYR-GCK EAS09352 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
NP_960739 Mycobacterium avium subsp. paratuberculosis K-10 AAS04122 cobaltochelatase/CobN
NP_855738 Mycobacterium bovis AF2122/97WP_216578 Mycobacterium tuberculosis H37Rv ZP_00878534 Mycobacterium tuberculosis C ZP_00771135 Mycobacterium tuberculosis F11 NP_336587 Mycobacterium tuberculosis CDC1551 CAA17283 Mycobacterium tubercu
YP_119348 Nocardia farcinica IFM 10152 BAD57984 cobaltochelatase/putative magnesium chelatase
ZP_00997311 Janibacter sp. HTCC2649 EAP96966 cobaltochelatase/cobaltochelatase
YP_480623 Frankia sp. Ccl3 ABD10894 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
Smo_CHLH#18508767_1
YP_288380 Thermobifida fusca YX AAZ54357 cobaltochelatase/cobaltochelatase, CobN subunit
ZP_00768491 Chloroflexus aurantiacus J-10-fl EAO58361 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
ZP_00398077 Deinococcus geothermalis DSM 11300 EAL81306 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_901241 Chromobacterium violaceum ATCC 12472 AAQ59247 cobalamin biosynthesis protein/cobalamin biosynthesis protein
ZP_00944252 Ralstonia solanacearum UW551 EAP73319 CobN protein/CobN protein
NP_522187 Ralstonia solanacearum GMI1000 CAD17777 Ralstonia solanacearum PROBABLE COBALAMIN BIOSYNTHESIS PROTEIN/PROBABLE COBALAMIN BIOSYNTHESIS PROTEIN
ZP_01154282 Methanosaeta thermophila PT EAR48056 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
NP_661322 Chlorobium tepidum TLS AAM71664 CobN protein, putative/cobN protein, putative
ZP_00511133 Chlorobium limicola DSM 245 EAM44203 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00592047 Prosthecochloris aestuarii DSM 271 EAN22734 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00676789 Pelobacter propionicus DSM 2379 EAO37839 CobN/magnesium chelatase /CobN/magnesium chelatase
YP_054820 Propionibacterium acnes KPA171202 AAT81862 cobalamin biosynthesis protein CobN/cobalamin biosynthesis protein CobN
YP_501772 Methanospirillum hungatei JF-1 ABD40053 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00860044 Bradyrhizobium sp. BTAi1 EAP29396 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
NP_533469 Agrobacterium tumefaciens str. C58 NP_355732 AAK88517 AAL43785 cobaltochelatase/cobaltochelatase /AGR_C_5085p /cobalamin biosynthesis protein
NP_102977 Mesorhizobium loti MAFF303099 BAB48763 cobaltochelatase/cobalamin synthesis protein; CobN
ZP_01196010 Xanthobacter autotrophicus Py2 EAS17644 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
ZP_00960135 Roseovarius nubinhibens ISM EAP75706 cobaltochelatase/cobaltochelatase
YP_168071 Silicibacter pomeroyi DSS-3 AAV96104 cobaltochelatase/CobN
YP_510873 Jannaschia sp. CCS1 ABD55848 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_769903 Bradyrhizobium japonicum USDA 110 BAC48528 cobaltochelatase/cobalamin biosynthesis protein
AAC16184 Rhodobacter capsulatus CobN protein
ZP_00632077 Paracoccus denitrificans PD1222 EAN64578 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00918983 Rhodobacter sphaeroides ATCC 17029 EAP67806 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
YP_352885 Rhodobacter sphaeroides 2.4.1 ABA78894 cobaltochelatase/Putative cobalamin biosynthesis protein CobN
ZP_00948642 Sulfitobacter sp. NAS-14.1 ZP_00954098 Sulfitobacter sp. EE-36 EAP82122 Sulfitobacter sp. NAS-14.1 EAP85331 Sulfitobacter sp. EE-36 cobaltochelatase/cobaltochelatase /cobaltochelatase /cobaltochelatase
ZP_00622705 Silicibacter sp. TM1040 EAN55548 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_01054941 Roseobacter sp. MED193 EAQ47432 cobaltochelatase/cobaltochelatase
YP_495624 Novosphingobium aromaticivorans DSM 12444 ABD24790 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
NP_940069 Rhodopseudomonas palustris CGA009 CAE26160 cobaltochelatase/putative cobaltochelatase subunit CobN
ZP_00804120 Rhodopseudomonas palustris BisB5 EAO86354 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
YP_484360 Rhodopseudomonas palustris HaA2 ABD05449 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
ZP_00808927 Rhodopseudomonas palustris BisA53 EAO90630 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
YP_222003 Bradyrhizobium sp. BTAi1 NP_768512 Brucella melitensis 16M YP_414706 Brucella melitensis bovar Abortus 2308 NP_698309 Brucella suis 1330 AAL51876 Brucella melitensis 16M AAN30224 Brucella suis 1330 AAX74642 Brucella a
NP_386063 Sinorhizobium meliloti 1021 CAC46536 Sinorhizobium meliloti cobaltochelatase/PROBABLE COBALAMIN BIOSYNTHESIS PROTEIN
YP_469993 Rhizobium etli CFN 42 ABC91266 cobalamin biosynthesis protein/cobalamin biosynthesis protein
YP_428447 Rhodospirillum rubrum ATCC 11170 ABC24160 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
ZP_01013371 Rhodobacterales bacterium HTCC2654 EAQ13102 cobaltochelatase/cobaltochelatase
ZP_01001926 Loktanella vestfoldensis SKA53 EAQ08066 cobN protein/cobN protein
ZP_00998596 Oceanicola batsensis HTCC2597 EAQ04532 cobaltochelatase/cobaltochelatase
ZP_01037775 Roseovarius sp. 217 EAQ28610 cobN protein/cobN protein
ZP_01154845 Oceanicola granulosus HTCC2516 EAR52955 probable cobalamin biosynthesis protein/probable cobalamin biosynthesis protein
YP_423790 Magnetospirillum magneticum AMB-1 BAE53231 Cobalamin biosynthesis protein CobN and related Mg-chelatase/Cobalamin biosynthesis protein CobN and related Mg-chelatase
ZP_00055308 Magnetospirillum magnetotacticum MS-1 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
ZP_00108621 Nostoc punctiforme PCC 73102 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
YP_321686 Anabaena variabilis ATCC 29413 ABA20791 cobaltochelatase/Cobaltochelatase, CobN subunit
NP_485729 Nostoc sp. PCC 7120 BAB78055 cobaltochelatase/cobalamin biosynthetic protein
ZP_00675718 Trichodesmium erythraeum IMS101 EAO25567 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_440713 Synechocystis sp. PCC 6803 BAA17393 cobaltochelatase/CobN protein
ZP_00513746 Crocosphaera watsonii WH 8501 EAM52949 CobN/magnesium chelatase /CobN/magnesium chelatase
YP_399116 Synechococcus elongatus PCC 7942 ABB56129 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
YP_172117 Synechococcus elongatus PCC 6301 BAD79597 cobaltochelatase/cobaltochelatase
ZP_01005399 Prochlorococcus marinus str. MIT 9211 EAQ09137 Cobalamin biosynthesis protein CobN/Cobalamin biosynthesis protein CobN
YP_291526 Prochlorococcus marinus str. NATL2A AAZ57823 cobaltochelatase, CobN subunit/cobaltochelatase, CobN subunit
NP_892997 Prochlorococcus marinus subsp. pastoris str. CCMP1986 CAE19338 cobalamin biosynthetic protein CobN/cobalamin biosynthetic protein CobN
YP_397417 Prochlorococcus marinus str. MIT 9312 ABB49981 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
NP_875349 Prochlorococcus marinus subsp. marinus str. CCMP1375 AAQ00002 Cobalamin biosynthesis protein CobN/Cobalamin biosynthesis protein CobN
ZP_01124052 Synechococcus sp. WH 7805 EAR18687 cobalamin biosynthetic protein CobN/cobalamin biosynthetic protein CobN
NP_894559 Prochlorococcus marinus str. MIT 9313 CAE20902 cobalamin biosynthetic protein CobN/cobalamin biosynthetic protein CobN
NP_897333 Synechococcus sp. WH 8102 CAE07755 cobalamin biosynthetic protein CobN/cobalamin biosynthetic protein CobN
YP_381666 Synechococcus sp. CC9605 ABB35111 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
YP_377129 Synechococcus sp. CC9902 ABB26085 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
ZP_01085490 Synechococcus sp. WH 5701 EAQ74520 cobalamin biosynthetic protein CobN/cobalamin biosynthetic protein CobN
NP_681690 Thermosynechococcus elongatus BP-1 BAC08452 cobaltochelatase/cobalamin biosynthetic protein
YP_477351 Synechococcus sp. JA-2-3B'a(2-13) ABD02088 CobN/magnesium chelatase domain protein /CobN/magnesium chelatase domain protein
YP_474199 Synechococcus sp. JA-3-3Ab ABC98936 CobN/magnesium chelatase domain protein /CobN/magnesium chelatase domain protein
ZP_00136286 Pseudomonas aeruginosa UCBPP-PA14 NP_251634 Pseudomonas aeruginosa PAO1 ZP_00974459 Pseudomonas aeruginosa 2192 AAG06332 Pseudomonas aeruginosa PAO1 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases/cobaltochela
ZP_00968704 Pseudomonas aeruginosa C3719 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
NP_792941 Pseudomonas syringae pv. tomato str. DC3000 AAO56636 cobaltochelatase/cobN/magnesium chelatase family protein
YP_274436 Pseudomonas syringae pv. phaseolicola 1448A AAZ37915 cobN/magnesium chelatase family protein /cobN/magnesium chelatase family protein
YP_236087 Pseudomonas syringae pv. syringae B728a AAY38049 cobaltochelatase/CobN/magnesium chelatase
YP_260756 Pseudomonas fluorescens Pf-5 AAY92920 cobaltochelatase/cobN/magnesium chelatase family protein
YP_348827 Pseudomonas fluorescens Pf0-1 ABA74836 cobaltochelatase/Cobaltochelatase, CobN subunit
ZP_00898555 Pseudomonas putida F1 EAP52378 Cobaltochelatase, CobN subunit/Cobaltochelatase, CobN subunit
NP_745644 Pseudomonas putida KT2440 AAN69108 cobaltochelatase/cobN protein, putative
ZP_01165536 Oceanospirillum sp. MED92 EAR62314 CobN/magnesium chelatase /CobN/magnesium chelatase
YP_437570 Hahella chejuensis KCTC 2396 ABC33145 cobaltochelatase, CobN subunit/cobaltochelatase, CobN subunit
YP_442928 Burkholderia thailandensis E264 ZP_00928293 Burkholderia mallei FMH ZP_00895869 root ZP_00501506 YP_102853 Burkholderia mallei ATCC 23344 ZP_00933199 Burkholderia mallei JHU ZP_00937572 Burkholderia pseudomallei 406e YP_333494 Bur
ZP_01009693 Burkholderia mallei SAVP1 EAG11429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
ZP_00485964 Burkholderia pseudomallei 668 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
ZP_00278566 Burkholderia xenovorans LB400 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
ZP_00986440 Burkholderia dolosa AUO158 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
YP_369045 Burkholderia sp. 383 ABB08401 cobaltochelatase/Cobaltochelatase, CobN subunit
ZP_00982506 Burkholderia cenocepacia PC184 ZP_00457859 Burkholderia cenocepacia AU 1054 ZP_00464797 Burkholderia cenocepacia HI2424 EAM09466 Burkholderia cenocepacia AU 1054 EAM16039 Burkholderia cenocepacia HI2424 COG1429: Cobalamin biosynth
ZP_00687426 Burkholderia ambifaria AMMD EAO46219 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00424221 Burkholderia vietnamiensis G4 EAM29240 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_614324 Methanopyrus kandleri AV19 AAM02254 Predicted protein of the CobN/Mg-chelatase family /Predicted protein of the CobN/Mg-chelatase family
NP_809407 Bacteroides thetaiotaomicron VPI-5482 AAO75601 protoporphyrin IX magnesium chelatase/protoporphyrin IX magnesium chelatase
YP_099973 Bacteroides fragilis YCH46 BAD43439 protoporphyrin IX magnesium chelatase/protoporphyrin IX magnesium chelatase
YP_212326 Bacteroides fragilis NCTC 9343 CAH08405 putative cobalamin biosynthesis-related protein/putative cobalamin biosynthesis-related protein
NP_905690 Porphyromonas gingivalis W83 AAQ66589 CobN/magnesium chelatase family protein /CobN/magnesium chelatase family protein
YP_099797 Bacteroides fragilis YCH46 YP_212167 Bacteroides fragilis NCTC 9343 BAD49263 Bacteroides fragilis YCH46 CAH08243 Bacteroides fragilis NCTC 9343 cobalamin biosynthesis protein CobN/putative cobalamin biosynthesis-related membrane prote
NP_662834 Chlorobium tepidum TLS AAG12412 Chlorobaculum tepidum AAM73176 Chlorobium tepidum TLS cobaltochelatase/BchH1 /magnesium-protoporphyrin methyltransferase
ZP_00588877 Pelodictyon phaeoclathratiforme BU-1 EAN25849 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00529851 Chlorobium phaeobacteroides DSM 266 EAM33897 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00660788 Prosthecochloris vibrioformis DSM 265 EAO15761 CobN/magnesium chelatase /CobN/magnesium chelatase
YP_374184 Pelodictyon luteolum DSM 273 ABB23141 cobaltochelatase/Magnesium-chelatase, subunit H
ZP_00591037 Prosthecochloris aestuarii DSM 271 EAN23842 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00532598 Chlorobium phaeobacteroides BS1 EAM63036 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00512934 Chlorobium limicola DSM 245 EAM42412 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00807183 Rhodopseudomonas palustris BisA53 EAO92295 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
ZP_00805574 Rhodopseudomonas palustris BisB5 EAO85068 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
YP_487583 Rhodopseudomonas palustris HaA2 ABD08672 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
ZP_00845625 Rhodopseudomonas palustris BisB18 ABD86877 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
Smo_CHLH#64563599_1
YP_425712 Rhodospirillum rubrum ATCC 11170 AAF37352 Rhodospirillum rubrum ABC21425 Rhodospirillum rubrum ATCC 11170 Magnesium-chelatase, subunit H/BchH /Magnesium-chelatase, subunit H
ZP_00049063 Magnetospirillum magnetotacticum MS-1 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
AAP59023 Thiocapsa roseopersicina BchH
BAA94057 Rubrivivax gelatinosus Mg protoporphyrin methyl transferase
ZP_01151179 Halorhodospira halophila SL1 EAR47267 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
AAM48616 uncultured proteobacterium magnesium-protoporphyrin methyltransferase
AAL76369 uncultured proteobacterium AAR38257 uncultured bacterium 581 CobN/magnesium chelatase family protein /magnesium-protoporphyrin IX chelatase, H subunit
ZP_01104349 gamma proteobacterium KT 71 EAQ56258 Magnesium-chelatase subunit H/Magnesium-chelatase, subunit H
ZP_00591033 Prosthecochloris aestuarii DSM 271 EAN23838 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00532599 Chlorobium phaeobacteroides BS1 EAM63037 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_662832 Chlorobium tepidum TLS AAM72410 Chlorobaculum tepidum AAM73176 Chlorobium tepidum TLS magnesium-chelatase, bacteriochlorophyll c-specific subunit/BchH2 /magnesium-chelatase, bacteriochlorophyll c-specific subunit
YP_378548 Chlorobium chlorochromatii CaD3 ABB27505 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
ZP_00588876 Pelodictyon phaeoclathratiforme BU-1 EAN25848 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00529852 Chlorobium phaeobacteroides DSM 266 EAM33898 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00512936 Chlorobium limicola DSM 245 EAM42413 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00660790 Prosthecochloris vibrioformis DSM 265 EAO15763 CobN/magnesium chelatase /CobN/magnesium chelatase
YP_374186 Pelodictyon luteolum DSM 273 ABB23143 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
ZP_00531536 Chlorobium phaeobacteroides BS1 EAM64087 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00528737 Chlorobium phaeobacteroides DSM 266 EAM34940 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00589473 Pelodictyon phaeoclathratiforme BU-1 EAN25311 CobN/magnesium chelatase /CobN/magnesium chelatase
YP_374703 Pelodictyon luteolum DSM 273 ABB23660 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
ZP_00661891 Prosthecochloris vibrioformis DSM 265 EAO14758 CobN/magnesium chelatase /CobN/magnesium chelatase
O50314 Prosthecochloris vibrioformis CA806C BCHH_CHLVI Magnesium-chelatase subunit H (Mg-protoporphyrin IX chelatase subunit H)/protoporphyrin IX Mg chelatase encoding subunit of 144 kDa
NP_662183 Chlorobium tepidum TLS AAG12407 Chlorobaculum tepidum AAM72525 Chlorobium tepidum TLS magnesium-protoporphyrin methyltransferase/BchH3 /magnesium-protoporphyrin methyltransferase
ZP_00591538 Prosthecochloris aestuarii DSM 271 EAN23230 CobN/magnesium chelatase /CobN/magnesium chelatase
YP_379289 Chlorobium chlorochromatii CaD3 ABB28246 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
ZP_00766270 Chloroflexus aurantiacus J-10-fl EAO60471 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
ZP_00517456 Crocosphaera watsonii WH 8501 EAM49451 CobN/magnesium chelatase /CobN/magnesium chelatase
ZP_00674656 Trichodesmium erythraeum IMS101 EAO26763 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_488773 Nostoc sp. PCC 7120 BAB76432 protoporphyrin IX magnesium chelatase/protoporphyrin IX magnesium chelatase
YP_322457 Anabaena variabilis ATCC 29413 ABA21562 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
ZP_00105988 Nostoc punctiforme PCC 73102 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
ZP_01085255 Synechococcus sp. WH 5701 EAQ74739 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
gnl|CMER|CMB093C_magnesium_chelatase_subunit_H
1493_Cre
AAC84033 Heliobacillus mobilis Mg chelatase subunit H BchH
gnl|CMER|CMO212C_magnesium_chelatase_subunit_H
NP_925568 Gloeobacter violaceus PCC 7421 BAC90563 cobaltochelatase/magnesium protoporphyrin IX chelatase subunit H
NP_488405 Nostoc sp. PCC 7120 YP_323814 Anabaena variabilis ATCC 29413 BAB76064 Nostoc sp. PCC 7120 ABA22919 Anabaena variabilis ATCC 29413 cobaltochelatase/cobaltochelatase /protoporphyrin IX magnesium chelatase /Magnesium-chelatase, subun
ZP_00107632 Nostoc punctiforme PCC 73102 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
ZP_00515704 Crocosphaera watsonii WH 8501 EAM51333 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_440360 Synechocystis sp. PCC 6803 BAA17040 cobaltochelatase/Mg-chelatase subunit; ChlH
AAB05210 Synechocystis sp. PCC 6803 Mg-chelatase subunit
ZP_00673343 Trichodesmium erythraeum IMS101 EAO27733 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_681062 Thermosynechococcus elongatus BP-1 BAC07824 cobaltochelatase/magnesium-protoporphyrin methyltransferase
YP_401154 Synechococcus elongatus PCC 7942 YP_172665 Synechococcus elongatus PCC 6301 BAD80145 ABB58167 Synechococcus elongatus PCC 7942 Magnesium-chelatase, subunit H/cobaltochelatase /magnesium-protoporphyrin methyltransferase /Magnesium-chelat
ZP_01000347 Prochlorococcus marinus str. MIT 9211 EAQ09085 cobaltochelatase/cobaltochelatase
NP_875295 Prochlorococcus marinus subsp. marinus str. CCMP1375 AAP99947 cobaltochelatase/Protoporphyrin IX Mg-chelatase subunit
YP_291575 Prochlorococcus marinus str. NATL2A AAZ57872 cobaltochelatase/magnesium-chelatase, subunit H
YP_397465 Prochlorococcus marinus str. MIT 9312 ABB50029 Magnesium-chelatase, subunit H/Magnesium-chelatase, subunit H
NP_892949 Prochlorococcus marinus subsp. pastoris str. CCMP1986 CAE19290 cobaltochelatase/protoporphyrin IX magnesium chelatase, subunit chlH
ZP_01124331 Synechococcus sp. WH 7805 EAR17922 cobaltochelatase/cobaltochelatase
YP_382128 Synechococcus sp. CC9605 ABB35573 cobaltochelatase/Magnesium-chelatase, subunit H
NP_896913 Synechococcus sp. WH 8102 CAE07335 cobaltochelatase/Protoporphyrin IX Magnesium chelatase subunit chlH
YP_376837 Synechococcus sp. CC9902 ABB25793 cobaltochelatase/Magnesium-chelatase, subunit H
ZP_01081531 Synechococcus sp. RS9917 EAQ67926 Protoporphyrin IX Magnesium chelatase subunit chlH/Protoporphyrin IX Magnesium chelatase subunit chlH
NP_894647 Prochlorococcus marinus str. MIT 9313 CAE20990 cobaltochelatase/Protoporphyrin IX Magnesium chelatase, subunit chlH
ZP_01085741 Synechococcus sp. WH 5701 EAQ74392 cobaltochelatase/cobaltochelatase
YP_474760 Synechococcus sp. JA-3-3Ab ABC99497 magnesium chelatase, H subunit/magnesium chelatase, H subunit
YP_477150 Synechococcus sp. JA-2-3B'a(2-13) ABD01887 magnesium chelatase, H subunit/magnesium chelatase, H subunit
12770_Cre AAC24000 Chlamydomonas reinhardtii CAC69552 CAC69537 magnesium chelatase H subunit/Magnesium chelatase H subunit /Magnesium chelatase H-subunit
Ppa_CHLH_2_1
Smo_CHLH_1_1 → (Smo_CHLH_2_1 is likely C terminus region of Smo_CHLH_1_1)
Smo_CHLH_3_2
CAA04526 Glycine max magnesium chelatase subunit
CAA51664 Antirrhinum majus protoporphyrin IX:Mg Chelatase
BAB41188 Amaranthus tricolor Mg-chelatase subunit chlH
AABB7152 Nicotiana tabacum Mg protoporphyrin IX chelatase
AAA99721 Hordeum vulgare subsp. vulgare AAK72401 protoporphyrin IX Mg-chelatase subunit precursor/Mg-chelatase subunit XANTHA-F
XP_478395 Oryza sativa (japonica cultivar-group) BAC83943 BAD31095 protoporphyrin IX magnesium chelatase (EC 4.99.1.-)-like protein/protoporphyrin IX magnesium chelatase-like protein /protoporphyrin IX magnesium chelatase-like protein
CAA92992 Arabidopsis thaliana magnesium chelatase subunit
AT5G13630 = NP_196867 BAB08689 AAL47483 AAL79577 AAN73308 GUN5 (GENOMES UNCOUPLED 5)/cobalamin biosynthesis protein /AT5g13630/MSH12_9 /AT5g13630/MSH12_9 /AT5g13630/MSH12_9
NP_619285 Methanosarcina acetivorans C2A AAM07765 hypothetical protein MA4424/hypothetical protein MA_4424
NP_615321 Methanosarcina acetivorans C2A AAM03801 protoporphyrin IX magnesium chelatase/protoporphyrin IX magnesium chelatase
NP_615319 Methanosarcina acetivorans C2A AAM03799 protoporphyrin IX magnesium chelatase/protoporphyrin IX magnesium chelatase
NP_615356 Methanosarcina acetivorans C2A AAM03836 cobaltochelatase/cobalamin biosynthesis protein N
YP_307174 Methanosarcina barkeri str. fusaro AAZ72594 cobaltochelatase/cobalamin biosynthesis protein N
NP_633626 Methanosarcina mazei Go1 AAM31298 cobaltochelatase/Cobalamin biosynthesis protein CobN
NP_987613 Methanococcus maripaludis S2 CAF30049 cobaltochelatase/probable metal chelatase
NP_615357 Methanosarcina acetivorans C2A AAM03837 cobaltochelatase/hypothetical protein (multi-domain)
NP_615355 Methanosarcina acetivorans C2A AAM03835 protoporphyrin IX magnesium chelatase/protoporphyrin IX magnesium chelatase
YP_305653 Methanosarcina barkeri str. fusaro AAZ71073 protoporphyrin IX magnesium chelatase/protoporphyrin IX magnesium chelatase
ZP_01089188 Blastopirellula marina DSM 3645 EAQ82301 cobalamin biosynthesis protein N/cobalamin biosynthesis protein N
ZP_00562515 Methanococcoides burtonii DSM 6242 EAN00369 PKD:CobN/magnesium chelatase:Cna B-type /PKD:CobN/magnesium chelatase:Cna B-type
NP_615358 Methanosarcina acetivorans C2A AAM03838 protoporphyrin IX magnesium chelatase/protoporphyrin IX magnesium chelatase
YP_304354 Methanosarcina barkeri str. fusaro AAZ69774 cobalamin biosynthesis protein/cobalamin biosynthesis protein
NP_633625 Methanosarcina mazei Go1 AAM31297 Cobalamin biosynthesis protein/Cobalamin biosynthesis protein
YP_305316 Methanosarcina barkeri str. fusaro AAZ70736 hypothetical protein Mbar_A1795/conserved hypothetical protein
ZP_00561612 Methanococcoides burtonii DSM 6242 EAN01204 CobN/magnesium chelatase /CobN/magnesium chelatase
NP_619497 Methanosarcina acetivorans C2A AAM07977 hypothetical protein MA_4643/hypothetical protein MA_4643
ZP_00969748 Pseudomonas aeruginosa C3719 ZP_00139592 Pseudomonas aeruginosa UCBPP-PA14 NP_250613 Pseudomonas aeruginosa PAO1 AAG05311 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases/COG1429: Cobalamin biosynthesis protein C
ZP_00975779 Pseudomonas aeruginosa 2192 COG1429: Cobalamin biosynthesis protein CobN and related Mg-chelatases
NP_947742 Rhodopseudomonas palustris CGA009 CAE27840 cobaltochelatase/CobN/Magnesium chelatase family
Smo_CHLH#19841177_1
NP_840831 Nitrosomonas europaea ATCC 19718 CAD84668 cobaltochelatase/CobN/magnesium chelatase
ZP_00903707 Shewanella sp. W3-18-1 ZP_00814008 Shewanella putrefaciens CN-32 EAO94656 EAP56479 Shewanella sp. W3-18-1 cobalamin biosynthesis protein CobN/CobN/magnesium chelatase /CobN/magnesium chelatase /cobalamin biosynthesis protein CobN
0.100