

>tr|A0A433UVM2|A0A433UVM2_ANAVA Uncharacterized protein OS=Trichormus
variabilis SAG 1403-4b OX=447716 GN=DSM107003_17120 PE=4 SV=1
MLKYTWTGQRLVFEAPKEAQMEIHTGIVASGISSNTIPCDRLALSETTSDECDTDSYEEI
TPINTTAMVSSINTKVEDTTKPLQILGLASVD

>tr|A0A2Z5TD99|A0A2Z5TD99_9CYAN Uncharacterized protein OS=cyanobacterium
endosymbiont of Rhopalodia gibberula OX=1763363 GN=RGRSB_1566 PE=4 SV=1
MLGYRGGNKSDFNIALLLTIIMDQILDSPTEQRKIILCCYVNATSRIQVVRITNIPNWHF
ERVIFSGQQLMFKAMPQALLEIHTGMMASAILSSDTILCERLSVNKENNKKIDKKHIVVYV
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>tr|A0A0P4UVN0|A0A0P4UVN0_9CYAN Uncharacterized protein OS=Leptolyngbya sp.
NIES-2104 OX=1552121 GN=NIES2104_23960 PE=4 SV=1
MPQILDPLPSEGSDPILCCYVNATSLIQIARITNVPNWFYFQVVFPGQRLLFQVAVSTAQL
EIHTGMMASAILSSDTIPCSLTMVSEEGDDEFPQSLGLAVTSHKVV

>tr|A0A139WYL3|A0A139WYL3_9CYAN Uncharacterized protein OS=Scytonema
hofmannii PCC 7110 OX=128403 GN=WAl_39425 PE=4 SV=1
MAQILDPLPSEQSAILFCCYVNATSKIQVARISNIPNWFYFQVVFPGQRLVFEAPREAQL
EIHTGMMASAILSSDRMPNRLVISEASNYELAANSQSEIDPFHKKPIVQPIHTKTGDSIK
SLNVAGLVSV

>tr|B1WU15|B1WU15_CROS5 Uncharacterized protein OS=Crocospaera subtropica
(strain ATCC 51142 / BH68) OX=43989 GN=cce_2729 PE=4 SV=1
MAQILDPIPTGQRNVLLCCYVNATNHIQVARITNIDNWFYFQVVFPGQRLVFEALPKAQL
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LKAALV

>tr|B0CEV4|B0CEV4_ACAM1 Uncharacterized protein OS=Acaryochloris marina
(strain MBIC 11017) OX=329726 GN=AM1_4372 PE=4 SV=1
MPQVIDPVPPNDSLDLIVCCYVNSTNKIQVARITNIPNWFYFQVVFPGQRLMFESVPEAHL
EIHTGMMASAILSSDTIPCYRLRLHQSVSASKQFLQGENEAAGTSEPSSMRSVPEAAKVS

>tr|A0A0C1YDP0|A0A0C1YDP0_9CYAN Uncharacterized protein OS=Lyngbya
confervoides BDU141951 OX=1574623 GN=QQ91_11850 PE=4 SV=1
MAQIIDHIPTEQSEILCCYVNATSKMQIVRITNIRDWYFQVVFPGQRLMFEAPPQAQL
EIHTGMMASAILSSDTISCARLAVDPEENAPWEQQIAANPQAEQATAVTAGS

>tr|A0A1Z3HH48|A0A1Z3HH48_9CYAN Cobalamin biosynthesis protein GTP-binding
protein OS=Halomicronema hongdechloris C2206 OX=1641165 GN=XM38_005780 PE=4
SV=1
MTSHLHAAPTADQQVLCCYQNHSSKIQVIRIADIPDQYFQVVFPGQRLMFEAIPEARL
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>tr|A0A218QT06|A0A218QT06_9CYAN Uncharacterized protein OS=Tolypothrix sp.
NIES-4075 OX=2005459 GN=NIES4075_59640 PE=4 SV=1
MAQILDSPPEQSGKILCCYVNATSKIQVARISDIPSWYFQVVFPGQRLVFEAPRVAHL
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>tr|K9TNN5|K9TNN5_9CYAN Uncharacterized protein OS=Oscillatoria acuminata
PCC 6304 OX=56110 GN=Oscil6304_4100 PE=4 SV=1
MSLDRGDPRSSYGKKIKENSEKNEMAMPKSTNSLSCSSSDAILCYLNSTSEIQVIKSEC
RDTWEFQVVFPGQRLFFEAISTAQLEIYKAKNSGLQLAARVKCDRLQVQERRSSFTTV
SQFLGQQLAAC

>tr|A0A2P7N222|A0A2P7N222_9CYAN Uncharacterized protein OS=Cyanobium
usitatum str. Tous OX=2116684 GN=C7K55_01620 PE=4 SV=1
MACSYRNTSDRMVILRCIGPEQFFLERVVFPELLSFQCPPSSVVKIWITHGLGGPELVET
VNCDLINDPPSLPAQAAQFEALPGSRGYLTGLLDGELPWATAS

>tr|K9U5A1|K9U5A1_CH RTP Uncharacterized protein OS=Chroococcidiopsis
thermalis (strain PCC 7203) OX=251229 GN=Chro_4388 PE=4 SV=1
MPLAVMAQILDSPPEQSDRLLCCYVNATSKIQIARISNIPNWFYFQVVFPGQRLVFEAP
PKATLEIHTGMMASAILSSDNIPCELCLEESKAEQMDRPAARSVEQKDKLSQRNFKSP
LLTTID

>tr|A0A401II29|A0A401II29_APHSA Uncharacterized protein OS=Aphanothece
sacrum FPU1 OX=1920663 GN=AsFPU1_2253 PE=4 SV=1
MNNRTSLIASTIMSQIFDPLPNGQRKEFLCCYVNATSQIQVVRITNVPNWFYFVAFPGQ
RLVFEALPDALLEVHTGMMASAILSSDTIPICERLCIDEGDNELVKGELITATLPTAHKPV
TMSNSTHHKISPLKPALV

>tr|A0A2P8VSI8|A0A2P8VSI8_9CYAN Uncharacterized protein OS=filamentous
cyanobacterium CCP5 OX=2107701 GN=C7271_26665 PE=4 SV=1
MAQILDPIPSDSSGWILCCYLNATSKIQIARITNIQNWFYFVVFPGQRLVFETTPNALL
EIHTGMMASAILSSDTIPCGRLMVDAPDNSAGGTSETSEEAVSAAPGESIRPTAMAVAAE

>tr|K9WCM3|K9WCM3_9CYAN Uncharacterized protein OS=Microcoleus sp. PCC 7113
OX=1173027 GN=Mic7113_1633 PE=4 SV=1
MQTITSSGKSNINSSARFLCSYTNITRHEIIRLKNIPGLHLERLIFPGERLMFEAVPE
AQLEIQSNQTLVSVVPCQLSVTETVTLNQLIKS

>tr|A0A1Z4S857|A0A1Z4S857_9NOSO Uncharacterized protein OS=Nostoc sp. NIES-
4103 OX=2005458 GN=NIES4103_35200 PE=4 SV=1
MDKQILCFYKNTTSQIQIAHIPNIVANLRLEQVVFPGEEILFEADTDAELKIDADTETGV
IETNKIPCFSLQVLGEI

>tr|K9RA12|K9RA12_9CYAN Uncharacterized protein OS=Rivularia sp. PCC 7116
OX=373994 GN=Riv7116_1352 PE=4 SV=1
MAQILDPLPPEQSGKSLCCYVNATSKIQVARISNIANWFYFVVFPGQRLVFEAPDEAQL
EIHTGMMASAILSSDTIPCDRLVINEANITELKVDSDKSNDDSRDENSLVSSIHKNGDNT
KPLIIVG

>tr|K9YWQ9|K9YWQ9_DACSA Uncharacterized protein OS=Dactylococcopsis salina
PCC 8305 OX=13035 GN=Dacsa_2786 PE=4 SV=1
MTTMTATQPLETENKMLLCHFFNHRDQVVIARISNIPNWYLERVVFPAQRFLFEAPEEAVL
EIHSPSEQGTIHEDTIPCRDLSISQDALNN

>tr|K9WBC5|K9WBC5_9CYAN Uncharacterized protein OS=Microcoleus sp. PCC 7113
OX=1173027 GN=Mic7113_1670 PE=4 SV=1
MNRFLKTTAVQEPKTLPEGQPILCFYKNTTDKIQIAKISNFKNYHFQVVFPAEKILFNA
FPEAELEIYTGSMMSAVLIEKIRCSRLQVNG

>tr|A0A1Z4UR05|A0A1Z4UR05_9CYAN Uncharacterized protein
OS=Sphaerospermopsis kisseleviana NIES-73 OX=1973480 GN=NIES73_29110 PE=4
SV=1
MAQILDPLPPEQSGKILCCYVNATSKIQVARISNVANWFYFVVFPGQRLVFEAPKKAQM
EIHTGMMASAILSSDTIPCDRLALNEPGSDEGDQDSAPGIEAANTNAMVSEMNTKIEDTTK
PLQNITASMKTYQSQHEFLNLGV

>tr|K9U9B2|K9U9B2_CHRTP Uncharacterized protein OS=Chroococcidiopsis
thermalis (strain PCC 7203) OX=251229 GN=Chro_5462 PE=4 SV=1
MTKIIRSLPAEQESLILCCYVNATSQIQVIRIVDLPSYYFERAVFPGQRLVFEALPSTEL
EVHTSMTIDSLADKISCLHLQVDNGN

>tr|Q31PU8|Q31PU8_SYNE7 Uncharacterized protein OS=Synechococcus elongatus
(strain PCC 7942 / FACHB-805) OX=1140 GN=Synpcc7942_0891 PE=4 SV=1
MSQILDSITVNSDNVVLCCYVNATSKIQVARITNITGWYFVVFPGQRLIFESYQEAML
EIHSGMMASAILADRIACADLIVGKELNEPEVMNSRGAA

>tr|A0A256BG92|A0A256BG92_9CYAN Uncharacterized protein OS=Pseudanabaena
sp. SR411 OX=1980935 GN=B9G53_10020 PE=4 SV=1
MFNIQAQKINSSNLESQFNQSIQIYRNDTEFVQIIRIAQPNTNFFERVVFPNQCIQFAAP
LDALLEICECVSSGLIHADTIPCSQIAVVAMDMNMLNLSSPKESNKDSLMIIVAA

>tr|K9XWX3|K9XWX3_STAC7 Uncharacterized protein OS=Stanieria cyanosphaera
(strain ATCC 29371 / PCC 7437) OX=111780 GN=Sta7437_3050 PE=4 SV=1
MFCPCPPNCSKKIFCCYINHSQVQIGRISNVADWYLERVIFPKQRLVFEAPAEAELEIY
TNSFSSAILSERIRCEHLEFIKLN

>tr|A0A2T1BX71|A0A2T1BX71_9CYAN Uncharacterized protein OS=Merismopedia
glauca CCAP 1448/3 OX=1296344 GN=C7B64_22625 PE=4 SV=1
MAQIIDPVPSSEAKSTLCCYVNASSQIQVARITNIQNWFYFVVFPGQRLVFEAVPSAQL
EIHTGMMASAILSDDKIPCDRLAIEEESPPDSVEQFKTENLDLSDHPNKNSINTMEKLAVSPV

V

>tr|K8GJB4|K8GJB4_9CYAN Uncharacterized protein OS=Oscillatoriales cyanobacterium JSC-12 OX=864702 GN=OsccyDRAFT_3209 PE=4 SV=1
MLGSIYLADQFTNLPNMAQIFDPLPSSSKNQIVCCYVNATSRIQIARITNIPNWFYFERVV
FPGQRLIFEAVSDALLEIHCMMASAILADTIPCDRLRVEDAVISSFDADHEQRLEQLND
GLGTHNTLVAESATVTT

>tr|A0A1Q8ZDT6|A0A1Q8ZDT6_9CYAN Uncharacterized protein OS=Leptolyngbya sp. 'hensonii' OX=1922337 GN=BST81_11155 PE=4 SV=1
MTQVLDLSLSLLECSDPILCCYVNGSCQMQUIARIADVPNWFYFERVVFPQRLIFEAPSLAH
LEIHTSLTATSILTDHISCQTLKVEEK

>tr|U5DA27|U5DA27_9CHRO Uncharacterized protein OS=Rubidibacter lacunae KORDI 51-2 OX=582515 GN=KR51_00020110 PE=4 SV=1
MKIVTTASLPTDTKQLCCYRNASDRLAVLTGEGVADWQLERIVFPGERFLFAAPPHAVLR
VCHPSSEGVTSARLSCSELYVGES

>tr|D8G0S1|D8G0S1_9CYAN Uncharacterized protein OS=[Oscillatoria] sp. PCC 6506 OX=272129 GN=OSCI_2890010 PE=4 SV=1
MTLTLDRLPSELSEGRILCCYVNETSMMQUIARIVNITNWFYFERTVFPGERLLFEALSEAEL
EIWQSVDTGAVAFDKFLCDELRVVEE

>tr|A0A1Z4JEF0|A0A1Z4JEF0_LEPBY Uncharacterized protein OS=Leptolyngbya boryana NIES-2135 OX=1973484 GN=NIES2135_19740 PE=4 SV=1
MPQILDVPSPNGSDPVLCCYVNATSQIQIARITDVPNWFYFERVVFPQRLIFEAIVTAHL
EIHTGMMASAILSDDTIPSTLIVTEGDEDASFRQELRSILATPAES

>tr|A0A0M1JNY4|A0A0M1JNY4_9CYAN Uncharacterized protein OS=Planktothricoides sp. SR001 OX=1705388 GN=AM228_22985 PE=4 SV=1
MNMQNAYNEKILCYFNPSELQIITVKNLAEKHYQRVVFPKQRLFFFAFPNSFLEVHRQ
TFTGTDLVDKISCQTLQVLNEDNVKIDNLSTVQ

>tr|A0A2K8SSR5|A0A2K8SSR5_9NOSO Uncharacterized protein OS=Nostoc flagelliforme CCNUN1 OX=2038116 GN=COO91_04494 PE=4 SV=1
MAQILDPLPPEQSGKILCCYINATSKIQVARISNIPNWFYFERVVFPQRLVFEAPRKGQL
EIHTGMMASAILSDDKIPCDRLMLDEPSVYEFDTDSSEKDLINTRSIVQQINTKIGDTTK
PLQILGLASVD

>tr|A0A2W1JPV6|A0A2W1JPV6_9CYAN Uncharacterized protein OS=Acaryochloris sp. RCC1774 OX=1764569 GN=C1752_08702 PE=4 SV=1
MISLLTSKTASYSGMKQATKTVCRYINHTRQFQIVRIANVSDTFFERTVLPGHQVVFEA
DFDAELEVHTYEIATAILTARISCDRLASI

>tr|A0A1Z4S1H0|A0A1Z4S1H0_9NOSO Uncharacterized protein OS=Nostoc sp. NIES-4103 OX=2005458 GN=NIES4103_11740 PE=4 SV=1
MWERKTLLIPDQSGWIVCNVNSTSQIQILRIANIPNWFYFERVIFPKQDFRFEAPPDADL
EIHTGILASAILSDDKIQCRLRIS

>tr|K9YM62|K9YM62_CYASC Uncharacterized protein OS=Cyanobacterium stanieri (strain ATCC 29140 / PCC 7202) OX=292563 GN=Cyast_1534 PE=4 SV=1
MAQILDALPNDNNKIMCCYVNATSQIQVARITNVANWFYFERVVFPQRLIFEALPEALL
EIHSGMMASSILSDTIPSTLSIQEEIEGNDNQANHNPSSDSQEENLELLSA

>tr|A0A2S6CST0|A0A2S6CST0_9CYAN Uncharacterized protein OS=Cuspidothrix issatschenkoi CHARLIE-1 OX=2052836 GN=CUN59_13835 PE=4 SV=1
MAQILDPLPPEHSEKILCCYVNATSKIQVARITNIPNWFYFERVVFPQRLVFEVPQEAQM
EIHTGMMASAIISDTIPCDRLIIHEPRADEAQDHSSSAINSSHSTMGSEINTKVDTTK
LQSVELASID

>tr|A0A1Q4RUK7|A0A1Q4RUK7_9CYAN Uncharacterized protein OS=Calothrix sp. HK-06 OX=1137096 GN=NIES2101_14770 PE=4 SV=1
MAQILDPLPPEQPGKILCCYVNATSKMQVARISDVPNWFYFERVVFPQRLVFEAPREAHL
EIHTGMMASAILSDDNISCNSLSVEDTVDGSDSQPVDGTINNKTNPQILTKPGETTKPLK
ALV

>tr|A0A261KRH2|A0A261KRH2_9CYAN Uncharacterized protein OS=Hydrocoleum sp. CS-953 OX=1671698 GN=AFK68_15820 PE=4 SV=1
MAQILDPLPSDSSNQILCCYVNTTSQIQIAKISNVTNWDYFERVVFPQRLVFEAVGACM

EIHTGTVASSILSDTIPCDRLQINEGPYSSISKTEKSVVKSATLSQRRKSPGKPEAVLST
VD
>tr|A0A1E5QG94|A0A1E5QG94_9CYAN Uncharacterized protein OS=Desertifilum sp.
IPPAS B-1220 OX=1781255 GN=BH720_18745 PE=4 SV=1
MTQTLDSLSSADSNRVLCSYVNLTNRIQVARISNVPSWYFERVVFPREHLMFEAPVEGTL
EIQHEPPSGIVLWDQFSCDRLQVHSSVVLETA
>tr|A0A0M1JNQ0|A0A0M1JNQ0_9CYAN Uncharacterized protein
OS=Planktothricoides sp. SR001 OX=1705388 GN=AM228_21630 PE=4 SV=1
MSQILDVPSPDRPNHILCCYVNATSKIQIARVTNISNWYFERVVFPQRLIFEALPEALL
EIHTGMMASAILSSDTIPCDRLIIGRPNDAAHQQPDSEKTLESVAKSLYNSKPFATPNKVKE
IAESFMEPALTLVD
>tr|B0JJPW8|B0JJPW8_MICAN Uncharacterized protein OS=Microcystis aeruginosa
(strain NIES-843) OX=449447 GN=MAE_38700 PE=4 SV=1
MAQILDPLPNGKNSILCCYVNATSHIQIVRITNIANWYFERVVFPQRLVFETLADAFL
EIHTGMMASAILSSDNIPCEERLYISDGDSDGQLEGEIFYPHSLEESQGAKIDNTVPFG
LSLASA
>tr|K9ZHU4|K9ZHU4_ANACC Uncharacterized protein OS=Anabaena cylindrica
(strain ATCC 27899 / PCC 7122) OX=272123 GN=Anacy_2472 PE=4 SV=1
MAQILDPLPPEQSGKFLCCYVNATSKMQVARISNIPNWYFERVVFPQRLVFEAPKEAQM
EIHTGMMASAILSSDTIPCDRLAISELTSDGCDTDSLEEKKPINTTSMGSSINTKIGDTT
KPLQIIGLASVD
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NIES-4101 OX=2005461 GN=NIES4101_54620 PE=4 SV=1
MAQILDPLPPEQSGKILCCYVNATSKIQVARISDIPNWYFERVVFPQRLVFEAPRLSHL
EIHTGMMASAIISDTIPCERLIVSDFDDELENDKLENTSELVNENINQTSIVSPIHSQTE
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IAM M-220 OX=454133 GN=NIES208_17175 PE=4 SV=1
MAQILDPLPEDKNKNLLCCYVNATSQIQVARITNIEDWYFERVVFPQRLVFEALSHGIL
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OX=118163 GN=Ple7327_2075 PE=4 SV=1
MAQILDPIPNEHRNGILCCYVNATSHIQVARIANVENWYFERVVFPQRLVFEALPEALL
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SFNQILVSAS
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OX=221360 GN=RS9917_10771 PE=4 SV=1
MGDYLYTNSTPKMVVLKICIGENHFYLEKVILPSETYWFNAPEESRVEIWQMAINGQLLSV
RADVSDFAANASDPELASNAMASPFHQAVA
>tr|Q05R32|Q05R32_9SYNE Uncharacterized protein OS=Synechococcus sp. RS9916
OX=221359 GN=RS9916_28094 PE=4 SV=1
MEDCVYRNETPKMVVLKICIGVNNFYLEKVVMPAEWFWFEAPLEARVEIWQMAVNGQLLSV
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ambiguum IAM M-71 OX=454136 GN=NIES2119_13065 PE=4 SV=1
MIDVYNATGDPSNSMQLTLCHYKNFSDKLQILRIANVPNWYFEKVVFPGEALLFQAPPQG
VLEVHTSAKVTTILADTINCRLRVQEIQIYVTEDNIFPHQEDNNANNSANIVNIS
>tr|Q46IY2|Q46IY2_PROMT Uncharacterized protein OS=Prochlorococcus marinus
(strain NATL2A) OX=59920 GN=PMN2A_1056 PE=4 SV=1
MWVMVDFSyrNITSSMVLKICIGPDRFFLERAIFFQEVFSSVAPEGSQLEIWGIESYGPN
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bouteillei VB521301 OX=1479485 GN=DA73_0241385 PE=4 SV=1
MAQILDPLPPEQSATLFCCYVNATSKIQVARISNIPNWYFERVVFPQRLVFEAPREAHL
EIHTGMMASAILSDRIPCNRLLVNEASNYELATTSQSEIDPFHKKPIVQAIHTKTGDSIK
SLNVTGLVSVD

>tr|F4XMV2|F4XMV2_9CYAN Uncharacterized protein OS=Moorea producens 3L
OX=489825 GN=LYNGBM3L_20620 PE=4 SV=1
MFTARRDHKCYLGVCKLTFRELIDMTQIFDPIPSDSQDSVLCYVFNATSQIQIARITNI
PNWYFERVVFPQRLVFEAPPQALLEIHTGMMASAILSSDTIPCDRLLVVSQSGNAYGYPVS
AESAQPADIKPHPETVDSQRVFTKLPKTLVSAV

>tr|K9Y162|K9Y162_STAC7 Uncharacterized protein OS=Stanieria cyanosphaera
(strain ATCC 29371 / PCC 7437) OX=111780 GN=Sta7437_4665 PE=4 SV=1
MFPSDRVITAKLSTMLCYINPTNKIQLIRVIKDRHLNQRSDAAAQMNSVVISDFEKIIF
PQQRILFEAMPEAQLEIYYSQGNPKIAQTIPCNLKVNCPTVT

>tr|A0A2W1JD40|A0A2W1JD40_9CYAN Uncharacterized protein OS=Acaryochloris
sp. RCC1774 OX=1764569 GN=C1752_05107 PE=4 SV=1
MNAEVKHGNNVIDETEQAQVMPPLSTEIERPKTLTLNRRDLICYTNDTKQIQIIRIARVS
DNFLERTVLPNCQILFAATADAELEVYTYDVATAILTERITCDRLITRQPLNASR

>tr|A0A367QXS5|A0A367QXS5_9NOSO Uncharacterized protein OS=Nostoc minutum
NIES-26 OX=1844469 GN=A6770_23750 PE=4 SV=1
MLNSSPADSSTYILCCYVNVNQTQIQRVARISNIPGWYFERVVFPQRLFFEAPQAAQMEFH
THVMASAVLSDRIPICERLQIDCGVDEQLVARHLLVSSVK

>tr|K9RXK5|K9RXK5_SYN3 Uncharacterized protein OS=Synechococcus sp.
(strain ATCC 27167 / PCC 6312) OX=195253 GN=Syn6312_3150 PE=4 SV=1
MSQVFDVPPSEHPDRILCCYVNVSSKMQIARITNIPNWFYFERVVFPQRLVFEAMQAAQL
EIHSGMMASAILSSDTIPQRLVIQEGGEQFFTTDPYAQQRIEEFNERSPVPSLSGERDS

>tr|B0CAR7|B0CAR7_ACAM1 Uncharacterized protein OS=Acaryochloris marina
(strain MBIC 11017) OX=329726 GN=AM1_5310 PE=4 SV=1
MIKTLESQPTQLTFCSYCNPSPRVQVVRITNIKNWYFERVVFPQQLVFDAPRTAHLEIH
SSEIATAIQVDCIPCRRLAVKTV

>tr|A5GWU1|A5GWU1_SYNR3 Uncharacterized protein OS=Synechococcus sp.
(strain RCC307) OX=316278 GN=SynRCC307_2447 PE=4 SV=1
MSLGCCSYRNDDDRMLRCFGSDGFYLERVIFPFEVLNLFVAPPEAEVEIWSHSIGSPEL
VATHPIRELVAPEPAELVNSN

>tr|K9QWM3|K9QWM3_NOSS7 Uncharacterized protein OS=Nostoc sp. (strain ATCC
29411 / PCC 7524) OX=28072 GN=Nos7524_4250 PE=4 SV=1
MAQILDPLPPEQSGKILCCYVFNATSKIQRVARISNIPNWFYFERVVFPQRLVFEAPLESQM
EIHTGMMASAILSSDTIPCDRLIINEPSSSEFNTDAIGTDPISTKPIVKSNTKLSDTTKP
LTTAGLASID

>tr|B4VKV8|B4VKV8_9CYAN Conserved domain protein OS=Coleofasciculus
chthonoplastes PCC 7420 OX=118168 GN=MC7420_451 PE=4 SV=1
MFNSLPTEYTNRVLCYNTNTSKQIQIIRITDIPNWFYFERILFPQQLLFEAIPHAHLEVY
KKRFGVADLVAKILCDFLQVQQAEEAPSPLYSARQ

>tr|A0A2A2TD04|A0A2A2TD04_9CYAN Uncharacterized protein OS=Calothrix
elsteri CCALA 953 OX=987040 GN=CK510_24310 PE=4 SV=1
MTQILDPLPPEQSGKILCCYVFNATSKIQRVARISDVPNWFYFERVVFPQRLVFEAPRTSHL
EIHTGMMASAIISDNILCDRLMVDFFDSDIKSENFDDGSRTSGDSINQTTMVSPHPIPG
ETTKPLKIVGLA

>tr|A0A2W1K4H1|A0A2W1K4H1_9CYAN Uncharacterized protein OS=Acaryochloris
sp. RCC1774 OX=1764569 GN=C1752_00825 PE=4 SV=1
MAQIIDPLPSDSSDSIVCCYRNVTSKIQRVARITNIPNWFYFERVIFPGQHLVFESTPEAQL
EIHTGMMASAILSSDTIPCYRLRVEQSVSASSQFIQSQNYQEGEAASPGVAIHQAS

>tr|K9XD80|K9XD80_9CHRO Uncharacterized protein OS=Gloeocapsa sp. PCC 7428
OX=1173026 GN=Glo7428_1482 PE=4 SV=1
MAQILDPLPPNQSSQLVCCYVFNATSKIQIARISNIPNWFYFERVVFPQRLVFEAPPKSMML
EIHTGMMASAILSSDTIPCDRLCISEDGKLEEAPEISTKKINLAAAVLTSVD

>tr|Q2JJH0|Q2JJH0_SYNJB Uncharacterized protein OS=Synechococcus sp.
(strain JA-2-3B'a(2-13)) OX=321332 GN=CYB_2256 PE=4 SV=1
MKRYAFVNRSGQVQVIRTIPGHWERTLFPQQAIFEAEPDDYLEVYSCCCSTAILEERRL
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>tr|A0A2T1DCI3|A0A2T1DCI3_9CYAN Uncharacterized protein OS=filamentous

cyanobacterium CCP2 OX=2107700 GN=C7B76_08645 PE=4 SV=1
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PCC 7418) OX=65093 GN=PCC7418_3546 PE=4 SV=1
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sp. SynAce01 OX=1916956 GN=BM449_12440 PE=4 SV=1
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THGLGGPELLETVAASELMIEEGDKRPA
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8106) OX=313612 GN=L8106_00155 PE=4 SV=1
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(strain NIES-39 / IAM M-135) OX=696747 GN=NIES39_003210 PE=4 SV=1
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MAQIIDPVPTDKSVHILCCYVNATSKIQIARITNVPGWYFERVVFPQRLIFEAVPDAML
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NIES-4075 OX=2005459 GN=NIES4075_22640 PE=4 SV=1
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protein OS=Halomicronema hongdechloris C2206 OX=1641165 GN=XM38_052320 PE=4
SV=1
MQFCSSVFMAQILDPLPPDSSGPILCCYLNATSKIQIVRITNVPNWFYFERVVFPQRLMF
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NIES-2104 OX=1552121 GN=NIES2104_21620 PE=4 SV=1

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boryana NIES-2135 OX=1973484 GN=NIES2135_41920 PE=4 SV=1
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cyanobacterium JSC-12 OX=864702 GN=OscyDRAFT_0818 PE=4 SV=1
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KORDI 51-2 OX=582515 GN=KR51_00022260 PE=4 SV=1
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MAQIIDPIPNDDRQKLLCCYVNATSKIQVARITNIANWFYFQRLVFEALPEAQL
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7502 OX=1173263 GN=Syn7502_01055 PE=4 SV=1
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NWFYFEKVVFPQQQLIFETVIDAQLEIHTGMMASSILSDVIPCIQLQVQDESQPPSWLPR
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sp. RCC1774 OX=1764569 GN=C1752_00325 PE=4 SV=1

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(strain ATCC 27147 / PCC 6307) OX=292564 GN=Cyagr_0633 PE=4 SV=1
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(strain ATCC 29371 / PCC 7437) OX=111780 GN=Sta7437_1645 PE=4 SV=1
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(strain SARG / CCMP1375 / SS120) OX=167539 GN=Pro_0731 PE=4 SV=1
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8501 OX=165597 GN=CwatDRAFT_4764 PE=4 SV=1
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DAVYAVLEREERMDYLVVETTGLADPLPIMVTFSTELKAFTHLDSVITVVDAAEAFTEDEH
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(strain CC9902) OX=316279 GN=Syncc9902_2245 PE=4 SV=1
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(strain MIT 9301) OX=167546 GN=P9301_08981 PE=4 SV=1
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(strain MBIC 11017) OX=329726 GN=AM1_2897 PE=4 SV=1
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LVEITA
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>tr|A0A0M1JL20|A0A0M1JL20_9CYAN Uncharacterized protein OS=Planktothricoides sp. SR001 OX=1705388 GN=AM228_27010 PE=4 SV=1
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PNNQPSALFCCYVNATNQIQVARITNVPNWFYFERVVFPQRLVFEAIVPSAQLLEIHTGMM
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IPPAS B-1220 OX=1781255 GN=BH720_24995 PE=4 SV=1
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EIHTGMMASAILSDDKIPCDRLKLEEVVTESRENLVAPPEPLAHLKIRPPLKSPALTSVD
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hofmannii PCC 7110 OX=128403 GN=WAL_10590 PE=4 SV=1
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6506 OX=272129 GN=OSCI_1880004 PE=4 SV=1
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CCALA 161 OX=2107688 GN=C7B62_06235 PE=4 SV=1
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5701 OX=69042 GN=WH5701_13330 PE=4 SV=1
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sp. NIES-4102 OX=2005460 GN=NIES4102_37510 PE=4 SV=1
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ATCC 29082 / PCC 7421) OX=251221 GN=gsl14316 PE=4 SV=1
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(strain IMS101) OX=203124 GN=Tery_1193 PE=4 SV=1
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LRIAG
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7367 OX=82654 GN=Pse7367_0843 PE=4 SV=1
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hofmannii PCC 7110 OX=128403 GN=WA1_25005 PE=4 SV=1
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(strain ATCC 29371 / PCC 7437) OX=111780 GN=Sta7437_2942 PE=4 SV=1
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(strain PCC 7424) OX=65393 GN=PCC7424_1414 PE=4 SV=1
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RAVPPQGHAFFAAGLQDHLEVHTGNPITSILADRIPCEQLAIWAS
>tr|K9W9X1|K9W9X1_9CYAN Uncharacterized protein OS=Microcoleus sp. PCC 7113 OX=1173027 GN=Mic7113_0678 PE=4 SV=1
MAQILDPLPPDNQONQQILCCYVNATSHIQIARITNIPNWFYFERVVFPQRLVFEALAKAQ
LEIHSGMMASAILS SDTIPCDRLRVDDNDNAIEPPAPKASEVTTSKQPVETVKVELVNHNI
RLSKETLTFATLG
>tr|A0A0D6ACL1|A0A0D6ACL1_9CHRO Uncharacterized protein OS=Geminocystis sp. NIES-3708 OX=1615909 GN=GM3708_891 PE=4 SV=1
MAQILDALPHNENDAILCCYVNATSQIQIARITNISNWFYFERVVFPQRLVFEALPEALL
EIHSGMMASAILS DTISCKRLCVTEQKVSTENGEEDSIVNINKDRNNNSDVEAIVA
>tr|A0A1U7J5E2|A0A1U7J5E2_9CYAN Uncharacterized protein OS=Phormidium tenue NIES-30 OX=549789 GN=NIES30_12750 PE=4 SV=1
MAQILDPLPSDGQSQVLCCYVNATSKIQVARITNVPDWYFERVVFPQRLLFETVPKALL
EIHTGMMASAILS SDSIP CERLQIDAPEPVGFEPASSDELEASRLAATLDEPAPAVAI SPA
S
>tr|A0A164CIB0|A0A164CIB0_9SYNE Uncharacterized protein OS=Synechococcus sp. MIT S9508 OX=1801629 GN=MIT S9508_00873 PE=4 SV=1

MIECVYRNNTNKMVIVKICIGESHFYLEKVVMPKEMFWFEAPQEARLELWLMSPQGQMLDV
RAYAADYAMDNDQVPESAMAS
>tr|B1XK18|B1XK18_SYNP2 Uncharacterized protein OS=Synechococcus sp.
(strain ATCC 27264 / PCC 7002 / PR-6) OX=32049 GN=SYNPCC7002_A2395 PE=4
SV=1
MAQILDPIPNDDNKALLCCYVNATSQIQVARITNVEDWYFERVVFPQORLIFEALPQAIL
EIHTGMMASAILSSDTIPCYRLAMQETGSETDEPEPAPVNDIPARPVAIAP
>tr|Q0I947|Q0I947_SYNS3 Uncharacterized protein OS=Synechococcus sp.
(strain CC9311) OX=64471 GN=sync_1821 PE=4 SV=1
MGECYHNDSSKMVILKICIGESHFFCEKVLMPFEVYFFEAPDDARLELWLLNGGEPMLHN
TFEAKEYALLSNRR LGDP
>tr|A0YTL9|A0YTL9_LYNBP Uncharacterized protein OS=Lyngbya sp. (strain PCC
8106) OX=313612 GN=L8106_08476 PE=4 SV=1
MAQILDPLPSNVSSQILCCYVNATSQIQIARISNIANWYFERVVFPQORLLFEALSEALL
EIHTGSMASAILSDRIPCRLQIDQNAPSVPTEDAHSSQAAQAYHQRVMSMSQKPRQPVP
ESLAKPALTAVD
>tr|D5A2E4|D5A2E4_ARTPN Uncharacterized protein OS=Arthrospira platensis
(strain NIES-39 / IAM M-135) OX=696747 GN=NIES39_C01280 PE=4 SV=1
MAQILDPLPYNPGRVLCYVNATSNIQIARISNVPNWWYFERVVFPQORLVFEAIPEALL
EIHTGKMASSILSDKIPCDRLQIDQELPAIDEVHPSAAAIAHYHERVTGRSSGAKPSVLT
PALSSID
>tr|Q2JLW6|Q2JLW6_SYNJB Uncharacterized protein OS=Synechococcus sp.
(strain JA-2-3B'a(2-13)) OX=321332 GN=CYB_1311 PE=4 SV=1
MQTLDAIPDKKRAERITCSYINATSSIQVVRITNIENWYFERVVFPQORLLFEAVPGAKL
EIHTGMMASSILADTIPCEKLRVRETEPVTVGA
>tr|B0JMN5|B0JMN5_MICAN Uncharacterized protein OS=Microcystis aeruginosa
(strain NIES-843) OX=449447 GN=MAE_34980 PE=4 SV=1
MLGIPDMRSRNTTRQKQIHIAEMEGNVMSNATVNQAIINCVYVNNTGKMAILRNNVDLIA
KWREVVVEPGEFECFQAPEGGHLDIFTYEMAAMILEHRIPCRLAI
>tr|A0A261KWQ8|A0A261KWQ8_9CYAN Uncharacterized protein OS=Hydrocoleum sp.
CS-953 OX=1671698 GN=AFK68_00860 PE=4 SV=1
MTIALDRLPKKQEQKFLCFYVNTTHKMQIARISNVENQYWERAVFPGERFLFEGVPEAEL
EIHQAQENGEIRCEFLCQDLKVDE
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IPPAS B-1220 OX=1781255 GN=BH720_16825 PE=4 SV=1
MIDVCINLES DRQFTDPICHKILCYTNPQHIQILRIANIPGWHYEKVAFPQQSLMFEA
FSEAILEIHS GTPATSIICDKIRCHLLRVEEGSEIY
>tr|D4ZS02|D4ZS02_ARTPN Uncharacterized protein OS=Arthrospira platensis
(strain NIES-39 / IAM M-135) OX=696747 GN=NIES39_E03400 PE=4 SV=1
MMSNLYQLNNHQTNKQLCCYVNDSSQKIEIARISNIDNWYLEHIVFPGERFLFEAPSDAEL
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cyanobacterium HT-58-2 OX=1940762 GN=BZZ01_24585 PE=4 SV=1
MAQILDPLPPEQSGQMFCCYVNATSKIQVARISNIPNWWYFERVVFPQORLVFEAPRGAQL
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LQVAGLLSID
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OX=1932621 GN=BV372_18880 PE=4 SV=1
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PLTIAGLASVD
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OX=118163 GN=Ple7327_0879 PE=4 SV=1
MCALDRSVATPSDFQLLCFYINATSRIQVIRITNIPNFHWEKVILPGQKLLFETVADAQL
EIHTSQNGANVIADVIPCQQLRVTEEKLKFTK
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agardhii NIVA-CYA 126/8 OX=388467 GN=A19Y_2084 PE=4 SV=1
MAQILDPLPSNSSGRILCCYVNATSHIQIARITNVPNWFYFQRLVFEAIPQATL
EIHTGSMASAIADNIPCDRLQIDQQSISYEDKPLTPNPQSRNFANKRRTVKQEPLTTPAL
TSVD
>tr|A0A0P4UWN3|A0A0P4UWN3_9CYAN Uncharacterized protein OS=Leptolyngbya sp.
NIES-2104 OX=1552121 GN=NIES2104_55950 PE=4 SV=1
MNSQVSAATLCCYTNATRHQIVRIVDLPNWFYFQRLVFEAPQAAHLEIHAGAR
STLTDTISCERLRVRSDSIASLLAACVP
>tr|Q118G5|Q118G5_TRIEI Uncharacterized protein OS=Trichodesmium erythraeum
(strain IMS101) OX=203124 GN=Tery_0672 PE=4 SV=1
MAQILDPLPSKSSNPIICCYINATSQIQIAKISNIPNWFYFQRLVFEASVIGALM
EVHTGALASSILSDTIPCDRLQINESPYSSICETKNSVARSVNLSPLRTSPSKSRQVLSR
VD
>tr|M1X314|M1X314_9NOST Uncharacterized protein OS=Richelia intracellularis
HH01 OX=1165094 GN=RINTHH_16250 PE=4 SV=1
MTQTLNSLPLNYSPIGILCIYSNHSNQVIVRISNIPWFYFQRLVFEALPEAYL
EIYRGDQNKAILAEKFPCKLQTS
>tr|A0A2T1E1B1|A0A2T1E1B1_9CHRO Uncharacterized protein OS=Chlorogloea sp.
CCALA 695 OX=2107693 GN=C7B70_23735 PE=4 SV=1
MTQTFDLLPSQYNHRIICDYINATNFIQIVRITNITNWFYFQRLVFEALPDAQL
EIHTSEIATAMKTDKIKCESLQIHEDFATF
>tr|A0A2R5FYF2|A0A2R5FYF2_NOSCO Uncharacterized protein OS=Nostoc commune
NIES-4072 OX=2005467 GN=NIES4072_49470 PE=4 SV=1
MAQILDPLPPEQSGKILCCYINATSKIQVARISNIPNWFYFQRLVFEAPRKAQL
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PLQFLGLASVD
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OX=372787 GN=FJSC11DRAFT_1515 PE=4 SV=1
MAQILDPLPPEQSGKILCCYVNATSKIQVARISNIPNWFYFQRLVFEAPVEAQL
EIHTGMMASAILSDRIPCDRLALNEPSSYELEGSEQASDSINKKTMAPINTRTEDTTKP
LTVAGFVSVD
>tr|K9S4X3|K9S4X3_9CYAN Uncharacterized protein OS=Geitlerinema sp. PCC
7407 OX=1173025 GN=GEI7407_0755 PE=4 SV=1
MNNPSTPDGWLCHYINTSPQIQRVQIANFPGQSFERLLFPMERLLFDAPAEAELEIQPQ
QRNPTEVIRIPCGQLAQTALISG
>tr|A0A1Z4SD80|A0A1Z4SD80_9NOSO Uncharacterized protein OS=Nostoc sp. NIES-
4103 OX=2005458 GN=NIES4103_53590 PE=4 SV=1
MAQILDPLPPEQSGNILCCYVNATSKIQVARISNIPNWFYFQRLVFEAPHEAQM
EIHTGMMASAILSDKIPCDRLAINEPSSNEFDTDSIGIDPISKNPVQSQINTKTGDTTKS
LTVAGLASID
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hegewaldii CCALA 016 OX=2107694 GN=C7H19_10240 PE=4 SV=1
MAQILDPLPNDQKKSILCCYVNATSHIQVVRISNMANWFYFQRLVFEALPESLL
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TINHFKAVLASAT
>tr|K9U1K6|K9U1K6_CHRTP Uncharacterized protein OS=Chroococciopsis
thermalis (strain PCC 7203) OX=251229 GN=Chro_2822 PE=4 SV=1
MIQVLDRAATNQSSVLCCYTNATNSLQIARITNIPHWFFERVVFPQRLVFEAVPDARLE
IHTGAASGSILSDKIPCDRLCVGESSVHSEDEFRRNY
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frigida ULC18 OX=2107698 GN=C7B82_02940 PE=4 SV=1
MAQILDPLAAGQPDGIICCYVNGSSRIQIARISNIPNWFYFQRLVFEAVPEAQL
EIHTGSMASAILSDRIACHSLQVGSQEPGEL
>tr|E0U953|E0U953_GLOV7 Uncharacterized protein OS=Gloeothece verrucosa
(strain PCC 7822) OX=497965 GN=Cyan7822_5435 PE=4 SV=1
MLKIFSPPTVNTTKQIVCCYCNRTQTIIARITNLDEHDCERVVFPQECFFFTAPYQAKL

EIYRQSALGVLQELIPCLELQIPKSR
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OX=317936 GN=Nos7107_2706 PE=4 SV=1
MAQILDSPPEQSGKILCCYINATSKIQVARISNISNWFYFQRLVFEAPPEAHM
EIHTGMMASAILSDTIPCDRLAIHEPSSSDFNNTDSVTLDPISKKPIVQSINTKREDTTK
LTIAG
>tr|L8M1L3|L8M1L3_9CYAN Uncharacterized protein OS=Xenococcus sp. PCC 7305
OX=102125 GN=Xen7305DRAFT_00034780 PE=4 SV=1
MSQILDSPNGENDSILCCYVNATSEIQIARITNIPNWFYFQRLVFEAVSKAQL
EIHTGMMASAILSDTIPCTRLSLNPPPTVTDVKETEVAACKVAVKVEQREDVAIKNKQKF
SMTSQLMQAAVSA
>tr|A9B9U7|A9B9U7_PROM4 Uncharacterized protein OS=Prochlorococcus marinus
(strain MIT 9211) OX=93059 GN=P9211_06781 PE=4 SV=1
MIDFSYQNKNTKMVVFRCIGPNNFFLERVVFPLETLSIKAPTESRVEIWGNDFYGPPIIEE
RIRINSSNEDIRLVA
>tr|K9P6G0|K9P6G0_CYAGP Uncharacterized protein OS=Cyanobium gracile
(strain ATCC 27147 / PCC 6307) OX=292564 GN=Cyagr_0967 PE=4 SV=1
MDALLCSYRNCSEMRRIIRCCGPEDFFLERVVFPFEVLTFHCPPATDVEIWARDSLGIVL
TEQLPADALAMQQSGVSPRPALPQVNPRAVGVGRGNASSVCLLPH
>tr|K9YUR2|K9YUR2_DACSA Uncharacterized protein OS=Dactylococcopsis salina
PCC 8305 OX=13035 GN=Dacsa_1398 PE=4 SV=1
MAQILDVPNTPSDPIVCCYLNATSSIQVIRITNLENWFYFQRLVFEALPEGIL
EVHTGMMASAILSQIPCFRLAVKEKEAEIDVEQIKSESAIAVVA
>tr|K9PLH9|K9PLH9_9CYAN Uncharacterized protein OS=Calothrix sp. PCC 7507
OX=99598 GN=Cal7507_2953 PE=4 SV=1
MAQILDPLPPEQSGTVLCCYVNATSKIQVARISNIRNWFYFQRLVFEAPQAGQM
EIHTGMMASAILSDKIPCDRLVIKEPSTYELNTDSDSEVTIDSLNKKPIVPPINTRTGD
TKPLTVAGLASVD
>tr|A0A0C2LN46|A0A0C2LN46_9CYAN Uncharacterized protein OS=Tolypothrix
campylonemoides VB511288 OX=1245935 GN=SD81_16570 PE=4 SV=1
MAQILDPLPPEQSGKIFCCYVNATSKIQVARISNIPNWFYFQRLVFEAPKEAQL
EIHTGMMASAILSDNIPCDRLAISEPSNYEFHTDSQPAIDPINKKPIVQTINTKTGDTK
PLQVAGLVYID
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OS=Okeania hirsuta OX=1458930 GN=D5R40_13845 PE=4 SV=1
MTQILDPLPSNSSNQILCCYVNATSQIQIARISNIPNWFYFQRLVFESVMGASM
EIHTGMMASAILSDTIPCDRLQINQGPYSSISKTEQGISKLVSLPQRRKTPAKPAAVLSA
VD
>tr|A0A0M2PPD7|A0A0M2PPD7_PROHO Uncharacterized protein OS=Prochlorothrix
hollandica PCC 9006 = CALU 1027 OX=317619 GN=PROH_18460 PE=4 SV=1
MSQILDVPVVDGSAATPLCCYVNATSKIQVARITNVSNWFYFQRLVFEAVPGSQ
LEIHTGMMASAILSDRIACEQLVVQEQHPEPSLVGLEGGSGSTPTATLTTPYDVATAGLM
VAK
>tr|A0A2T1F7B4|A0A2T1F7B4_9CYAN Uncharacterized protein OS=filamentous
cyanobacterium Phorm 6 OX=2107706 GN=C7B67_27590 PE=4 SV=1
MSDQLSSKGNQMLCYANVTNKIQVVRIGNIPNWFYFQRLVFEAVPGSQ
TGAVPSAILSNDNIPCYVLRVIEEVSSEFELVIPEKCAVLAR
>tr|A8ZNW8|A8ZNW8_ACAM1 Uncharacterized protein OS=Acaryochloris marina
(strain MBIC 11017) OX=329726 GN=AM1_D0209 PE=4 SV=1
MSSASTGVLDRCPDITELPEKVMCRYVNEMQRTQIIRIVNIPQDFLERTVLPDHLVFET
YPDAELEVHTYEMASATLTAKII
>tr|K9Z0M5|K9Z0M5_CYAAP Uncharacterized protein OS=Cyanobacterium aponinum
(strain PCC 10605) OX=755178 GN=Cyan10605_0558 PE=4 SV=1
MAQILDALPNNENDSILCCYVNATSQIQVARITNIENWFYFQRLVFEALPEALL
EIHSGMMASAILSDTIPCKRLCISEEKIEEKKEDEDEDSSLYNKRKEDESEKLEVLT
>tr|G6FT65|G6FT65_9CYAN Uncharacterized protein OS=Fischerella thermalis

OX=372787 GN=FJSC11DRAFT_2062 PE=4 SV=1
MKWKQSYHGWLIEIIPMPKGYLFQCWLPDEKTGFSDRQIYPTFTQAFAAAKKRADLEAVS
LALIRFLSQSYEPCNLSSNEYKALETSIVNFVQQASRTQMHSPTLLTQNQILCFYKNTT
SQIQILRISHSTNCFEQIVFPGEQMLFEAFQAELEIHMDSTTGTTLINKILCSNLQVY
G
>tr|K9YEJ2|K9YEJ2_HALP7 Uncharacterized protein OS=Halotheca sp. (strain
PCC 7418) OX=65093 GN=PCC7418_3260 PE=4 SV=1
MTTIASEPLKNKKTMLLCHFFNHRDQVVIARISNIPNHWYLERVVFPQRFLFEAPEEAVL
EIHSPDQGTIHEDTIACRELSISENALGN
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brevissima NIES-22 OX=1973478 GN=NIES22_44930 PE=4 SV=1
MAQILDPLPPEQSGTILCCYINATSKIQVARITNIPNHWYFERVVFPQRQLVFEAPREGQM
EIHTGMMASAILSSDTIPCDRLAINEHGTYESSNNSDVTIGSIHKNPLVQPINTKIEDTTK
PLSVAGLASID
>tr|U5QJW7|U5QJW7_9CYAN Uncharacterized protein OS=Gloeobacter kilauensis
JS1 OX=1183438 GN=GKIL_1643 PE=4 SV=1
MHQSLDGLPPNDASLTCSYANRTGSLQIVRITNVAGWYFERVVFPQRQLVFEAPREGQM
VYTGSHATCLLADSVPCSQLEIREVVSSLPVAAEQ
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'hensonii' OX=1922337 GN=BST81_22815 PE=4 SV=1
MPQLLDPVPSDNSDRIVCSYVNATSKIQVVRISNIPNHWYFERVVFPQRQLVFEAPREGQM
EIHTGMMASAILSSDRIPCDRLMVEDAGYPSIDPANQQSIEEENEGPNLSVTAPPPALTST
IE
>tr|A0A367S1M5|A0A367S1M5_9NOSO Uncharacterized protein OS=Nostoc minutum
NIES-26 OX=1844469 GN=A6770_07875 PE=4 SV=1
MNNQILCFYKNTTNQLQIARISAIIFTANECEQIVFPGEQLFFKARPDAELKIDTDTKTG
VIQTNKILCLYLKVLGED
>tr|B2J5C9|B2J5C9_NOSP7 Uncharacterized protein OS=Nostoc punctiforme
(strain ATCC 29133 / PCC 73102) OX=63737 GN=Npun_F3903 PE=4 SV=1
MAQILDPLPPEQSGKILCCYINATSKIQVARICNIPNHWYFERVVFPQRQLVFEAPRKGQL
EIHTGMIASAILSSDKIPCDRLMLETSTHEFDTDSLGSKDP LN TKSLVQQINTNTGDSIK
PLQVAL
>tr|D4TS42|D4TS42_9CYAN Uncharacterized protein OS=Raphidiopsis brookii D9
OX=533247 GN=CRD_01942 PE=4 SV=1
MAQILDPLPPEQSGKILCCYINATSKIQVARISNVPNHWYFERVIFPQRQLVFEAPKYAQM
EVHTGMMASAILSSDTIPCDRLRLTETDEDENNETPTLAVVVDNNRDISSEVHKQFALLEA
RTLASS
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tolypothrichoides VB-61278 OX=1233231 GN=SD80_27140 PE=4 SV=1
MAQILDPLPPEQSGKLFCCYVNATSKIQVARISNIPNHWYFERVVFPQRQLVFEAPREAQL
EIHTGMMASAILSSDTIPCDRLAISEPNSFVFDTDSSAPVMD SINKKQIVQINTITGDFIK
SLQVAGLVSID
>tr|K9UM18|K9UM18_CHAP6 Uncharacterized protein OS=Chamaesiphon minutus
(strain ATCC 27169 / PCC 6605) OX=1173020 GN=Cha6605_4936 PE=4 SV=1
MPHILDPLPENHNDEICCCYVNSTSQIQVARITNVHNHWYFERVVFPQRQLIFEAPSYSYL
EIHTGMMASSILSDKIPCCQLIVLGEDEPHPFSAKTVPELEYAHQ
>tr|Q8YP91|Q8YP91_NOSS1 Alr4308 protein OS=Nostoc sp. (strain PCC 7120 /
SAG 25.82 / UTEX 2576) OX=103690 GN=alr4308 PE=4 SV=1
MATSSSAVMAQILDPLPPEQSGKVLCCYVNATSKIQVARITNIPNHWYFERVVFPQRQLV
EAPIEGQMEIHTGMMASAILSSDTIPCDRLIMSEPSSNEFN TDSVGTDP ISTKSVVQTNNT
KPLTVAGLASVE
>tr|L8N780|L8N780_9CYAN Uncharacterized protein OS=Pseudanabaena biceps PCC
7429 OX=927668 GN=Pse7429DRAFT_0761 PE=4 SV=1
MLNKITQINIKSSKDQHHQITCLYRNEGETVEILRISHAGIIFWEKAI FPNQCIQFSAP
RDALLEIHAGFTCSAIHADTIPCVQLAIIGMDMGREVS DIREMRQEFRQDIFATVA
>tr|K9TDI6|K9TDI6_9CYAN Uncharacterized protein OS=Oscillatoria acuminata

PCC 6304 OX=56110 GN=Oscil6304_0449 PE=4 SV=1
MAQLQAPETAIGNSTDILCCYVNITSKIQIIRICNIANWYFERVMFPGQRLLFQAPQQAL
LEVHTGGTAGAILSDTIPCDRLICDE
>tr|B7JZ21|B7JZ21_RIP01 Uncharacterized protein OS=Rippkaea orientalis
(strain PCC 8801) OX=41431 GN=PCC8801_2066 PE=4 SV=1
MTNGLHIASIIAMAQILDPIPTVQRRVLLCCYVNATSQIQVVRITNVPNWFYFERVVFPGQR
LVFEALPEALLEIHTGMMASAILSDTIPCERLSINDSDDEETEEQFITASLATDKKTLE
MSDHPSHSQLSALKPALV
>tr|K9SM24|K9SM24_9CYAN Uncharacterized protein OS=Pseudanabaena sp. PCC
7367 OX=82654 GN=Pse7367_2933 PE=4 SV=1
MVMSQLLDPVPAGNQKIVCCYTNTTSKIQVVRITNVPDWYFERVAFPGQHLLIFEALPSGQ
LEIHTGMMASSILSDTIACVQLQVENDSTTLPEWLPLKTSTGAAQETEQFKTEVAN
>tr|K9RRX3|K9RRX3_SYNP3 Anaerobic dehydrogenase, typically selenocysteine-
containing OS=Synecococcus sp. (strain ATCC 27167 / PCC 6312) OX=195253
GN=Syn6312_1100 PE=3 SV=1
MDDFPTQATLAVQTPLHLCCYRNISEELQVIRLVQDGAWERVVFPQQILFGANPDDEVK
VYHQAHNPQIAEVI PCQQLLVRETRSSSRANKPDPINPPTNVSTLCPYCGVCGGLEAVPH
SQSATGKIRGDREHPSSQGMICVKGATILESVDQQRLLYPLWRDRLDQSFQRISWDEAF
DHIVKRIQSVRFTQGADAICMYGSGQFQTEDYYMAQKLLKGCLGTNNFDANSRLCMSSAV
AAYINSFGSDGPPCCYDDLELTDCAFLIGTNTAECHPIVFNRLRKHKKFNPKVKLIVVDP
RSTPTAEVADLHLAINPGTDIDLLHGMGHLLKWLIDAEFIDECTQGFAQYIQVVAEYP
PEMVAERCGITVTDLEKAARYWGQAKAVLSLWSMGINQSSEGTAKARSLINLHLLTGQIG
RPGSGPFSLTGQPNAMGGREAGGLSHLLPGYRLVKNPQHRQDLEEFWQLPPGQISPAPGR
SVWEMIRGLETGDVGCLWIAATNPAVSLPDIERVKKALLRSPFTIYQDAYFPTETAAYAH
LVLPAAQWSEKTGTMTNSERRVTLCPKFRPPGSARPDWEIFAEVGRRLGFADKFNFADA
AAVYGEFVQLTQGRVCDQSGISHQRLQELGPLQWPCDVNASDEIAKQTKRLYTDFQFLTP
NHRAKFALEHSRGLAEPADDEFVLTTRGLYGHWHTQTRTGHIAKITKMHPRPLLEIHP
RDAKQLGLKPDLLVEIKSRRLACLPLVITKAITPGTVFMPMHWGFLWGDNTEVNALTHP
EACPISLQPELKACAVQLIPVRSVTATSQALATPAEQGNINIPALR
>tr|K9VEU5|K9VEU5_9CYAN Uncharacterized protein OS=Oscillatoria nigro-
viridis PCC 7112 OX=179408 GN=Osc7112_1241 PE=4 SV=1
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EVCRSAETGAIVCERILCDRLRVEELSTAD
>tr|A0A2G4F234|A0A2G4F234_9CYAN DUF1830 domain-containing protein
OS=Tychonema bourrellyi FEM_GT703 OX=2040638 GN=CP500_008970 PE=4 SV=1
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RFAV
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lithophora Alchichica-D10 OX=1188229 GN=GlitD10_2599 PE=4 SV=1
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