

Supplementary Table S1.

Deduced amino acid sequences of genes proposed to be involved in iron cycling in the *Telmatospirillum* MAG.

>SA7853BIN3_00738 Urocanate reductase
MSKTEVSRRLQAVTVGAVAVGGGAALNMAVPGTAEALVRKLPGNWDETWVDVIVVVGSGF
AGLAAAASAAAGAKTILLEKMPSTYGGNSIINGGVFAAWDDKWHYREKLNLTGDSPEQHF
QDILKGGDYYSIPELAKLVADGSADALAWVVDEGGAELRPTVTRAGGHTAYRTHAAKSGV
GREYTEALRkiaEKHGKPTLGTEVTWIWRADADPKSPVLGVEVVRGKVMNLKANKAVI
LASGGFSQNVDMRMSHNPRLTSDYNCTNHKGATGEIHKFAQAVGADTLQMNFIQLYPYAE
PETGLLDAQAVYFNGPGYGIYVSKQGRFVNELEERRDVVAYAQINLGKDAKPTWSIFT
EAMILPMGGAPEEIEDGLKRGRFVKADTIPELAQKCKIPSDTLVDTVNKYIQYHKDGKDP
EFNKPI TPAMFSLEKGPYYAIAQWPVAVHFCMGLRTNAKTQVIDVFGSPIPKLYAAGEVV
GGVHGSNRLGSNAIPTCIVFGRTAGRNAVL D

>SA7853BIN3_04245 Denitrification system component NirT
MNQSDEMVERRRPTLWGLAVGIWGLFARPSAQLSLGLLLLLTGFLAGILFWGGFNWGLEMT
NNETFCRSCHEMDQNSYREYRTSVHDQNHAGVRATCPDCHVPHDWHKMKRkiaASSEVF
HHLTGEIDTREKFEAKRLDLARSVWQTMKETDSRECRNCHSFDSMDLARQTDRARVAHTD
AETDGRTCIDCHKGIAHRLPAGMTEAERELNQSMFVGNRR

>SA7853BIN3_04711 Cytochrome c-552
MNPKVSVSSLLASVAFLALAAAPAQAI DWSGVQKDVVLLYPGQASLEWVLTNGEHDGAA
KFKQKNCKECHIGEENKMGPLAASGKVNPEQPIAGKPGTIPAKVKVAHDADTLYVHLEF
AEGTQPDQAKYATKVSMMLSDGKVPADRAGCWAACHDDSTDMASASGATRTKYLK
PRAKITRPGGDEMKSADDELAKLKADGYGLEWAEELNPGSPAHAAYTVFDKREEAKPA
AVAAEASFANGTWSVTL SRKHLHAGAPYKIDIDPGKSFTVGFVHAGHTARRFHVVSIDQSL
VLDQGTADFVAAK

>SA7853BIN3_04712 hypothetical protein
MIFRKLVLIGLVSLAITLSSAAAARAEDPAPATTPAVYAEKGDQTCCLKCHDNEQVTSILK
TPHGTKGDIRTPAANHGCECHGASPEHVASRPAKGEKKALPAIRFSGPNISPVADRNAV
CLTCHENSARINWQGSQHASN DVACSTCHTVHAQKDPVLVKATQPKCFTCHAQQRAESF
QRSHHPVREGKVCADCHNVHGSPPGPKLVKEVSNINETCYNCHAEKRGPMLEWHQPVRENC
DNCHTPHGSSQAALLTERMPYLCSSCHSATGNNSGGWFGGSRSLPGHSPSNVMMNELNN
RSCLNCHSNIHGSNSPPGQAFLR

>SA7853BIN3_04713 hypothetical protein
MKKQYSLRFLALAGVCLAPLAAQAQDFDLGDAPQAAAPAKQYTNEIDVGVRYQSSTSPLY
GRYTGTDSKGFGLGGFHLESTMPASGAPLKVEATGTNLNFQPDHQPNALAPESEVN
VSAGQQGIWKAGAYYNAITYTGQKFLTPYTASGNLAPGQQAFFGGQTITGYTAAGVPILSA
VPAAGKPGTAAYVNNAPPEFQTTAGTRRDIGGVDGKYIIDAWTITGFRHEHKEGTTLQ
TMYTSNAGIAFPQPVNYDTRYNVTA AFNTRRLQAQLGYNFSKFSDNASFFTSPLYFATS
ATAQSVSVYSQPPSNFAHYVNGAAGYNLTPTRITSNFQYGLEMSDGALGAGTATPLSEI
GGAASAARLALNPGGDQMARVYNANLGVTSRPMAGLDVKVGYGIDGRENSSSPMTVYVNS
HGDGAPALIGNILQONWTKQKATLEAGYKVLNPTKVSVGYRLDDVHRSAGAVASLPMSSL
GWVGHSTENTEWIKVSDHSLAQLDSSVTYEHAVRTGLMELAPGSGTVTNGVQVQNSSMPFY
EAPRTSDRVKLRADYMPADQWTIGANARYEANHYNSSTITGTQRDYNTSAGPDITYSPT
KAISLHGFYTYEEIYYVNRNGVPSLTKNKGWSAATTDVHTAGVSADWQVSRERLKVGA
EYTFSYGDIGYNLYDGLALNTATAASYNVSNLPTIDSSMHSVKLRAEYKLTDAITLMG
GYGFDMYKDNDSYGSWSPGMASNASGLAAPLVNTFTXXXGSPDFCPLGRSASSGPFFFT
LAGAQAPALFSSPWREKLRPLFFLHSARHRRPA

>SA7853BIN3_04795 Citrate synthase
MTQDENKDLVTLVDGASGRFELPLIPGTVGPKVIDIRSLYGLTGYFTYDPGYTSTGSC
SKITYIDGDNIGILLHRGYPIDQLAEHSDYLEVCYLLLRGELPDAKQKAKFEGDIRNHTMV
HEQINSFYRGRFRDAHPMAVMCGVVGALSIFYHDSLADIADPHQRMVASHRMI AKMPTIAA
WAYKYSRGEPIYPRNSLSFAENFLHMMFATPCEEYKVN PVLARAMERILILHADHEQNA
STSTVRMAGSSGANPFACIAAGIASLWGPAGHGANEAVLQMLTQIGSKERIPFIARAKD
KNDPFRMLMGFHRVYKNYDPRAKVMQRTCHEVLDDELGVRDEPLELELAMELERIALED
PYFVDKKLYPNVDFYSGIIIFKAMGIPVSMFTVLFVAVARTVGVVAQWNEMIGDPHQKIGRPRQL
YTGAHRDFVPLHARG

>SA7853BIN3_04796 hypothetical protein

MRTGVMPDFDAWDIIKVPFPYTDRPVREHRPAVVVAANGIQREHLLWVLMITSAENRG
WPGDVGVSNLSEAGLPAESVVRTAKIATIEIKEAERIGSLPADDRILVAHYLTTGLARTT
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