

ORGANISM ID	PYL- TMA METHYLTRANSFERASE AMINO ACID SEQUENCE WITH PYRROLYSINE HIGHLIGHTED
<i>Bilophila_ sp_4_1_30,</i>	<p>MKRWAHSSLMGGVGVGLNFLREKDCEKIHEASLEVLHDRGAYFDSETAREVLRDHGCWED ADGCTHFPRTLVEALEAVPAEFVHRGRTPDDDIHMAQDQVYASNFGEGIFTHDLETGER RSTVKQDAVDILRVVDSLNDNIHIYNRAIGPQDVPSESASMHNAEVAFICYTSKPMHLVSGS PFQTKMIKMAEIAAGGKEELKRRPRTAFNHTTISPLRISHEACENAIIVAEAGLPNHIL VMVQQGATSPISYAGSVAVHNADFLAFNTLMQCVNRGNPTLYGASACVMDMCKGLSLVAA PEVFLVNAAMARMSKYNNIPSYIAGGOTDSICNDVQAGAERLNRLMTALAGASVLFQGG MLETGLTFDIPTLLVDDEIIDYVLRMLAGFKVDATTLSTDLIKEVGPFGTYLAEMDTFEH LGDLSYTNLMNRRNYDMWAASGKPDLYGQARERAKEILATHKQKNPLSPEQVKAIRDVLV DAEGELGVADFWKGKEEKRFIDNDLY</p> <p>(Pyl at AA 327 of 506)</p>
<i>Bilophila_ 3_1_6_V2,</i>	<p>MKRWAHSSLMGGVGVGLNFLREKDCEKIHEASLEVLHDRGAYFDSETAREVLRDHGCWED ADGCTHFPRTLVEALEAVPAEFVHRGRTPDDDIHMAQDQVYASNFGEGIFTHDLETGER RSTVKQDAVDILRVVDSLNDNIHIYNRAIGPQDVPSESASMHNAEVAFICYTSKPMHLVSGS PFQTKMIKMAEIAAGGKEELKRRPRTAFNHTTISPLRISHEACENAMIVAEAGLPNHIL VMVQQGATSPISYAGSVAVHNADFLAFNTLLQCVNRGNPTLYGASACVMDMCKGLSLVAA PEVFLVNAAMARMSKYNNIPSYIAGGOTDSICNDVQAGAERLNRLMTALAGASVLFQGG MLETGLTFDIPTLLVDDEIIDYVLRMLAGFKVDATTLSTDLIKEVGPFGTYLAEMNTFEH LGDLSYTNLMNRRNYDMWAASGKPDLYGQARERAKEILATHKQKTPLSPEQVKAIRDVLV DAEGELGVADFWKGKEEKRFIDNDLY</p> <p>(Pyl at AA 327 of 506)</p>
<i>Bilophila_ 3_1_6_V2,</i>	<p>MAQRWKKAGSLTTGGMSLVNFTQDEMDAIHRATLEVLEHTGVLIGSPEARALLVEAGASV IDEDIVRFPQWMVADAVSCAPETLLLAGRTPD RDVVDSTRVMFTNFGEAVYLIDPDTGE VRNTTKKDVEKLTRVVDALDVIPVCERMAGA QDYPEQVAELHNYEALLMNTTKHVFTGGG NGKLTQYMIDMAKAAVGEENFEERCVPVTFNTCPISPLKLTADVCEVIMTAARNGATVNVL SMGMAGGSTPVNLAGALVVHNCEALAGLVLAQTTRRGAKFIYGSSTAMDRLRYGAAVVG PELAVLNAGVAAMARYYKLPWAAGGOGDSKCGDAQSGHEKTLTGLLPMLAGANIYGLG MLEMGMTISYSQLLMDAEMAEMMLFSMDGIVVNDLTVSVDVIKEVGPVRSDFLAHMNTFEN MYIQSKPKLIDRLTRDRWNEAGHLDMESRALIAAKELLATWEPEPLPEEACARVRAVLNA AERDYGVPESLE</p> <p>(Pyl at AA 327 of 493)</p>

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<i>Bilophila_</i> <i>ATCC_49260</i>	<p> MKRWAHSSLMGGVGVGLNFLREKDCCKIHEASLEVLHDRGAYFDSETAREVLRDHGCWED ADGCTHFPRTLVEALEAVPAEFVHRGRTPDDDIHMAQDQVYASNFGGEGIFTHDLETGER RSTVKQDAVDILRVVDSLNDNIHIYNRAIGPQDVPSESASMHNAEVAFCYTSKPMHLVSGS PFQTKKMIKMAEIAAGGKEELKKRPRTAFNHTTISPLRISHEACENAMIVAEAGLPNHIL VMVQQGATSPISYAGSVAVHNADFLAFNTLLQCVNRGNPTLYGASACVMDMKKGLSLVAA PEVFLNAAMARMSKYYNIPSYIAGGQTDSICNDVQAGAERALNRLMTALAGASVLFQGG MLETGLTFDIPTLLVDDEIIDYVLRMLAGFKVDATTLSTDLIKEVGPFGTYLAEMNTFEH LGDSTYNLMNRRNYDMWAASGKPDLYGQARERAKEILATHKQKNPLSPEQVKAIRDVLV DAEGELGVADFWKGKEEKRFIDNDLY* </p> <p>(Pyl at AA 327 of 506)</p>
<i>Bilophila_</i> <i>ATCC_49260</i>	<p> MAQRWKKAGSLTTGGMSLNVFTQDEMDAIHRATLEVL EHTGVLIGSPEARALLVEAGASV IDEDIVRFPQWMVADAVSCAPETLLLGRTPDRDVL DSTRVMFTNFGEAVYLIDPDTGE VRNTTKKDVEKLTRVVDALDVIPVCERMAGA QDYPEQVAELHNYEALLMNTTKHVFTGGG NGKLTQYMIDMAKAAVGEENFEERCPVTFNTCPISPLKLTADVCEVIMTAARNGATVNVL SMGMAGGSTPVNLGALVVHNCEALAGLVLAQTTRRGAKFIYSSSTAMDLRYGAAVVGT PELAVLNAGVAAMARYYKLP SWAAGQGDSKCGDAQSGHEKTLTGLLPMLAGANIIYGLG MLEMGMTISYSQLLMDAEMAEMMLFSMDGIVVND ETLSDVIKEVGPRSDFLAHMNTFEN MYIQSKPKLIDRLTRDRWNEAGHLDMESRALIAAKELLATWEPEPLPEEACARVRAVLNA AERDYGVPESE* </p> <p>(Pyl at AA 327 of 493)</p>
<i>Methanosarcina</i> <i>barkeri</i> <i>ASM97002v1</i> (Archaeal reference sequence)	<p> MAKNNAVAGFNALNGVELNFLFTTDELKAIHYATMEVLM DPGIQVSDPEARQIFKENGCEV NEKTNVVKIPEYLVRKALQLAPSRFVLWGRDKKFNTVQECGGKVHWTFCFGTGKVKYQD GKYVTVDSVEKDIADIAKLCDWAENIDYFSLPVSARDIAGQGAQDVHETL TPLANTAKHF HHIDPVGGENVEYYRDIVKAYYGGDEEEARKKPIFSMLLCPTSPLELSVNACQVVIK GARF GIPVNVLSMAMSGGSSPVYLAGTLVTHNAEVL SGIVLAQLTVPGAKVWYGSSTTTFDLKK GTAPVGSPELGLISA AVAKLAQFYGLPSYVAGSQSDAKVPDDQAGHEKTM TLLPALAGA NTIYGAGMLELGMTFSMEQLVIDNDIFSMVKKAMQ GIPVSEETLAVESIQKVGIGNFLA LKQTRQLVDYPSNPMLLDRHMFWDWAAAGSKDLATVAHEKVEDVLKNHQVTPIDADIFKD MQAIVDKADKAFRGM* </p> <p>(Pyl at AA 333 of 496)</p>