

GDH. List of genes and optimum growth temperatures

Opt. Temp.	Growth (°C)	Accession_number_and_Species
22		ELS30268.1 [<i>Pseudanabaena_biceps_PCC_7429</i>]
37		EGJ70233.1 [<i>Bacteroides_coprosuis_DSM_18011</i>]
30		ALS79895.1 [<i>Planococcus_kocurii</i>]
45		AEW04907.1 [<i>Sulfobacillus_acidophilus_DSM_10332</i>]
37		AEE13276.1 [<i>Porphyromonas_asaccharolytica_DSM_20707</i>]
37		EMD99258.1 [<i>Pseudomonas_stutzeri_NF13</i>]
30		EKU29406.1 [<i>Alcaligenes_sp._HPC1271</i>]
37		EIA16798.1 [<i>Clostridium_perfringens_F262</i>]
37		EHA17544.1 [<i>Halomonas_sp._HAL1</i>]
37		EGE27438.1 [<i>Moraxella_catarrhalis_O35E</i>]
37		EGE26670.1 [<i>Moraxella_catarrhalis_101P30B1</i>]
37		EGA38201.1 [<i>Salmonella_enterica_subsp._enterica_serovar_Montevideo_str._IA_2010008282</i>]
37		AUY29140.1 [<i>Escherichia_coli</i>]
30		ASV30406.1 [<i>Maribacter_cobaltidurans</i>]
28		ATL83975.1 [<i>Streptomyces_malaysiensis</i>]
26		AFV86422.1 [<i>Alteromonas_mediterranea_DE1</i>]
50		SMC01596.1 [<i>Sulfobacillus_thermosulfidooxidans_DSM_9293</i>]
37		SMB92486.1 [<i>Peptoniphilus_asaccharolyticus_DSM_20463</i>]
28		OOP61299.1 [<i>Arthrobacter_sp._SRS-W-1-2016</i>]
30		AND41967.1 [<i>Bacillus_oceanisediminis_2691</i>]
28		KXA34217.1 [<i>Staphylococcus_aureus</i>]
37		AFX90100.1 [<i>Helicobacter_pylori_Aklavik86</i>]
25		BAP84658.1 [<i>Lactobacillus_hokkaidonensis_JCM_18461</i>]
28		AFM59527.1 [<i>Enterobacter_cloacae_subsp._dissolvens_SDM</i>]
37		ADY36188.1 [<i>Bacteroides_salanitronis_DSM_18170</i>]
37		AGW84240.1 [<i>Bifidobacterium_animalis_subsp._lactis_ATCC_27673</i>]
78		KHC95959.1 [<i>Thermotoga_sp._Xyl54</i>]-
30		KAJ28402.1 [<i>Pseudomonas_aeruginosa_M10</i>]
37		AFU41346.1 [<i>Propionibacterium_acnes_C1</i>]
30		AFU45269.1 [<i>Acidovorax_sp._KKS102</i>]
26		ABI77516.1 [<i>Hyphomonas_neptunium_ATCC_15444</i>]
25		EAQ42780.1 [<i>Polaribacter_sp._MED152</i>]
65		AEV15549.1 [<i>Thermus_sp._CCB_US3_UF1</i>]
28		AFK63375.1 [<i>Advenella_kashmirensis_WT001</i>]
30		EQM83169.1 [<i>Stenotrophomonas_maltophilia_MF89</i>]
37		EMG30292.1 [<i>Campylobacter_showae_CC57C</i>]
28		EME69651.1 [<i>Magnetospirillum_caucaseum</i>]
37		EKT62111.1 [<i>Providencia_alcalifaciens_Dmel2</i>]
30		EGU00928.1 [<i>Acinetobacter_baumannii_ABNIH3</i>]
30		EGO65932.1 [<i>Acetonema_longum_DSM_6540</i>]
37		EGF49896.1 [<i>Actinomyces_sp._oral_taxon_170_str._F0386</i>]
30		EEL84441.1 [<i>Bacillus_cereus_AH1272</i>]
30		ELK41699.1 [<i>Brevibacillus_agri_BAB-2500</i>]
26		AFV85481.1 [<i>Alteromonas_mediterranea_DE1</i>]
28		ORL45099.1 [<i>Zunongwangia_atlantica_22II14-10F7</i>]
37		ALU83768.1 [<i>Listeria_monocytogenes</i>]
20		AMP97068.1 [<i>Pedobacter_cryoconitis</i>]
37		KXB81812.1 [<i>Varibaculum_cambriense</i>]
30		ALV09269.1 [<i>Roseateles_depolymerans</i>]

30 ALO46674.1 [*Pseudohongiella spirulinae*]
30 CUH53241.1 [*Shimia marina*]
28 KRG28254.1 [*Salegentibacter mishustinae*]
30 AIE32843.1 [*Bacillus thuringiensis* serovar *kurstaki* str. HD-1]
26 CEM57971.1 [*Xanthomonas campestris* pv. *campestris*]
30 CAP42835.1 [*Bordetella petrii*]
28 KHE92493.1 [*Candidatus Scalindua brodae*]
30 KGH26017.1 [*Comamonas testosteroni*]
37 AHG81894.1 [*Bibersteinia trehalosi* USDA-ARS-USMARC-188]
37 AHG79658.1 [*Mannheimia varigena* USDA-ARS-USMARC-1388]
30 KFX63213.1 [*Burkholderia* sp. K24]
30 ETT63245.1 [*Paenibacillus* sp. FSL_R7-277]
29 EPE93997.1 [*Rhizobium grahamii* CCGE_502]
37 EPF23053.1 [*Klebsiella pneumoniae* subsp. *pneumoniae* B5055]
28 EOS93342.1 [*Erwinia tracheiphila* PSU-1]
30 EPC65060.1 [*Lactobacillus paracasei* subsp. *tolerans* Lpl14]
37 EOR21003.1 [*Clostridium sartagoforme* AAU1]
30 EON72493.1 [*Lysinibacillus sphaericus* OT4b.31]
37 AGH38306.1 [*Bibersteinia trehalosi* USDA-ARS-USMARC-192]
30 ENO96228.1 [*Thauera phenylacetica* B4P]
30 EMY34539.1 [*Arthrobacter crystallopoietes* BAB-32]
30 EMT90349.1 [*Acinetobacter baumannii* ABNIH5]
30 EMF06805.1 [*Serratia marcescens* VGH107]
37 EMC47454.1 [*Streptococcus mutans* SA38]
37 ELV06143.1 [*Brachyspira hampsonii* 30599]
28 ELV07312.1 [*Wohlfahrtiimonas chitinoclastica* SH04]
32 ELP52983.1 [*Microcystis aeruginosa* TAIHU98]
30 ELK46429.1 [*Halobacillus* sp. BAB-2008]
28 EKT78693.1 [*Rhodococcus opacus* M213]
75 EKF50234.1 [*Thermosiphon africanus* H17ap60334]
35 EKE32837.1 [*Salimicrobium jeotgali*]
28 EKF36941.1 [*Bacillus xiamenensis*]
28 EHJ96541.1 [*Agrobacterium tumefaciens* 5A]
28 EGD54612.1 [*Gordonia neofelifaecis* NRRL_B-59395]
30 ADM71247.1 [*Paenibacillus polymyxa* E681]
28 WP_014332063.1 [*Sinorhizobium fredii*]
30 WP_005000751.1 [*Nitrococcus mobilis*]
30 PJM66389.1 [*Bacillus subtilis*]
28 AKX57894.1 [*Oblitimonas alkaliphila*]
28 PBI84830.1 [*Variovorax boronicumulans*]
37 OZS77933.1 [*Planococcaceae bacterium* VT-49_Tetzosporium_himinis]
30 OZQ78918.1 [*Paenibacillus odorifer*]
37 OZG65257.1 [*Bifidobacterium eulemuris*]
37 OYN34808.1 [*Enterococcus faecalis*]
28 OXS15995.1 [*Zobellella denitrificans*]
99 WP_011012748.1 [*Pyrococcus furiosus*]
85 BAN90344.1 [*Aeropyrum camini* SY1_=_JCM_12091]
90 BAA80383.2 [*Aeropyrum pernix* K1]
37 BAI60865.1 [*Methanocella paludicola* SANAE]
37 KQC15291.1 [*Methanosaeta* sp. SDB]
27 KPQ41220.1 [*Candidatus Methanoperedens* sp. BLZ1]
37 AIS31989.1 [*Methanobacterium formicicum*]

37 AAM30053.1 [Methanosarcina_mazei_Go1]
35 PAV08686.1 [Methanocorpusculum_parvum]
35 AKJ39708.1 [Methanosarcina_barkeri_CM1]
30 KGK99756.1 [Methanococcoides_methylutens]
37 AUB59784.1 [Methanobacterium_subterraneum]
30 KQC12212.1 [Desulfuromonas_sp._SDB]
33 KQC10805.1 [Candidatus_Cloacimonas_sp._SDB]
37 AEE91450.1 [Tepidanaerobacter_acetatoxydans_Re1]
30 KIX15625.1 [Dethiosulfatarculus_sandiegensis]
20 EEB84258.1 [Roseobacter_sp._GAI101]
28 EED35449.1 [Luminiphilus_syltensis_NOR5-1B]
25 EDZ42865.1 [Rhodobacteraceae_bacterium_HTCC2083]
28 AUZ85152.1 [Methylophaga_nitratireducenticrescens]
35 GAP44769.1 [Lentimicrobium_saccharophilum]
45 EEX11196.1 [Silicibacter_lacuscaerulensis_ITI-1157]
15 EDZ62302.1 [Sulfurimonas_gotlandica_GD1]
58 KIE58786.1 [Methylacidiphilum_kamchatkense_Kam1]
28 AFI85374.1 [Methylophaga_nitratireducenticrescens]
32.5 AHB49186.1 [Hyphomicrobium_nitrativorans_NL23]
60 ACD83816.1 [Methylacidiphilum_infernorum_V4]
18 AFV23154.1 [Methanolobus_psychrophilus_R15]
37 AAM06542.1 [Methanosarcina_acetivorans_C2A]
85 BAD85620.1 [Thermococcus_kodakarensis_KOD1]
85 AAK53112.1 [Thermococcus_waiotapuensis]
83 EHR77478.1 [Thermococcus_litoralis_DSM_5473]
80 ASJ02396.1 [Thermococcus_profundus]
80 BAA28943.1 [Thermococcus_profundus]
85 AMQ19106.1 [Thermococcus_peptonophilus]
88 WP_088866669.1 [Thermococcus_radiotolerans]

GDH. List of genes with a resolved structure at RCSB Protein Databank

Opt. Temp. Growth (°C)	Accession_number_PDB	Species
37	1AUP	<i>Clostridium symbiosum</i>
80	1B26	<i>Thermotoga maritima</i>
83	1BVU	<i>Thermococcus litorlis</i>
97	1GTM	<i>Pyrococcus furiosus</i>
95	1V9L	<i>Pyrobaculum islandicum</i>
37	2YFQ	<i>Peptoniphilus asaccharolyticus</i>
75	3AOE	<i>Thermus thermophilus</i>
37	4FCC	<i>Escherichia coli</i>
28	4XGI	<i>Burkholderia thailandensis</i>
28	5IJZ	<i>Corynebacterium glutamicum</i>

GPAT. Bacteria. List of genes and optimum growth temperatures

Opt. Temp.	Growth (°C)	Accession_number_and_Species
25		ELS32782.1 [<i>Pseudanabaena_biceps_PCC_7429</i>]
37		EIC03023.1 [<i>Treponema_saccharophilum_DSM_2985</i>]
30		ATG90710.1 [<i>Methylobacterium_koyamae</i>]
35		ADO76313.1 [<i>Halanaerobium_praevalens_DSM_2228</i>]
30		EJZ59104.1 [<i>Pseudomonas_fluorescens_R124</i>]
60		EHO40009.1 [<i>Caldithrix_abyssi_DSM_13497</i>]
37		EFQ23609.1 [<i>Aminomonas_paucivorans_DSM_12260</i>]
37		ADL13794.1 [<i>Acetohalobium_arabaticum_DSM_5501</i>]
25		EIJ33952.1 [<i>Thiothrix_nivea_DSM_5205</i>]
30		ADP97585.1 [<i>Marinobacter_adhaerens_HP15</i>]
37		EHY31206.1 [<i>Sutterella_parvirubra_YIT_11816</i>]
37		EFF63510.1 [<i>Turicibacter_sanguinis_PC909</i>]
32		APV44660.1 [<i>Dehalogenimonas_formicexedens</i>]
80		AEH50552.1 [<i>Pseudothrombococcus_thermarum_DSM_5069</i>]
35		ADK82223.1 [<i>Sediminispirochaeta_smaragdinae_DSM_11293</i>]
41		EAY55918.1 [<i>Leptospirillum_rubarum</i>]
30		ALS79409.1 [<i>Planococcus_kocurii</i>]
55		ADR18966.1 [<i>Calditerrivibrio_nitroreducens_DSM_19672</i>]
30		EJZ60418.1 [<i>Pseudomonas_fluorescens_R124</i>]
30		EHQ07781.1 [<i>Leptonema_illini_DSM_21528</i>]
37		AEE16096.1 [<i>Treponema_brennaborensis_DSM_12168</i>]
30		AEC02086.1 [<i>Sphaerochaeta_coccoides_DSM_17374</i>]
37		AEB13779.1 [<i>Treponema_succinifaciens_DSM_2489</i>]
70		ADY73919.1 [<i>Desulfurobacterium_thermolithotrophum_DSM_11699</i>]
37		ADY37927.1 [<i>Bacteroides_salanitronis_DSM_18170</i>]
55		AEA33247.1 [<i>Hippea_maritima_DSM_10411</i>]
37		ADV45935.1 [<i>Nitratifractor_salsuginis_DSM_16511</i>]
28		ADU49710.1 [<i>Intrasporangium_calvum_DSM_43043</i>]
30		KAJ26249.1 [<i>Pseudomonas_aeruginosa_M10</i>]
26		ABI75600.1 [<i>Hyphomonas_neptunium_ATCC_15444</i>]
45		ADI14672.1 [<i>Truepera_radiovictrix_DSM_17093</i>]
28		ADH69776.1 [<i>Nocardiosis_dassonvillei_subsp._dassonvillei_DSM_43111</i>]
25		ADG92116.1 [<i>Arcobacter_nitrofigilis_DSM_7299</i>]
28		ADN76808.1 [<i>Ferrimonas_balearica_DSM_9799</i>]
37		ERH14168.1 [<i>Actinomyces_graevenitzii_F0530</i>]
50		AFZ36656.1 [<i>Stanieria_cyanosphaera_PCC_7437</i>]
25		AFZ13352.1 [<i>Crinalium_epipsammum_PCC_9333</i>]
25		AFZ09650.1 [<i>Oscillatoria_nigro-viridis_PCC_7112</i>]
25		AFY90730.1 [<i>Chroococcidiopsis_thermalis_PCC_7203</i>]
25		AFZ60793.1 [<i>Anabaena_cylindrica_PCC_7122</i>]
28		AEH89674.1 [<i>Mesorhizobium_opportunistum_WSM2075</i>]
50		AEE96815.1 [<i>Mahella_australiensis_50-1_BON</i>]
37.5		EFY07712.1 [<i>Succinatimonas_hippeii_YIT_12066</i>]
37		EFY04338.1 [<i>Phascolarctobacterium_succinatutens_YIT_12067</i>]
35		EFU92919.1 [<i>Enterococcus_faecalis_TX0309A</i>]
37		EFU88199.1 [<i>Enterococcus_faecalis_TX0309B</i>]
37		EFS06536.1 [<i>Enterococcus_faecium_TX0133a04</i>]
37		EFQ03885.1 [<i>Megasphaera_micronuciformis_F0359</i>]
37		EFO60743.1 [<i>Escherichia_coli_MS_145-7</i>]

37 EFK72573.1 [*Escherichia coli*_MS_78-1]
37 EFK50290.1 [*Escherichia coli*_MS_107-1]
25 ADR32891.1 [*Sulfuricurvum kujiense*_DSM_16994]
68 ADL08250.1 [*Thermosediminibacter oceani*_DSM_16646]
30 EHP88642.1 [*Geobacter metallireducens*_RCH3]
30 EHO50524.1 [*Lactobacillus kisonensis*_F0435]
37 EHM54848.1 [*Cardiobacterium valvarum*_F0432]
37 EHM42883.1 [*Anaeroglobus geminatus*_F0357]
35 EHB50180.1 [*Paenibacillus lactis*_154]
37 EGG51651.1 [*Parasutterella excrementihominis*_YIT_11859]
65 EGD51504.1 [*Thermoanaerobacter ethanolicus*_JW_200]
37 EGA37672.1 [*Salmonella enterica*_subsp._*enterica*_serovar_Montevideo_str._IA_2010008282]
37 EFN39130.1 [*Escherichia coli*_W]
30 EFM10745.1 [*Paenibacillus curdlanolyticus*_YK9]
30 EED68647.1 [*Comamonas testosteroni*_KF-1]
28 EDT12485.1 [*Paraburkholderia graminis*_C4D1M]
30 ASV32642.1 [*Maribacter cobaltidurans*]
30 ASV30329.1 [*Maribacter cobaltidurans*]
28 ATL84365.1 [*Streptomyces malaysiensis*]
28 ALL67914.1 [*Paraburkholderia caribensis*_MBA4]
28 OXC74793.1 [*Caballeronia sordidicola*]
32 ASC72192.1 [*Halomicronema hongdechloris*_C2206]
28 OTP78821.1 [*Caballeronia sordidicola*]
37 ORI05316.1 [*Staphylococcus sciuri*]
37 AMY87605.1 [*Salmonella enterica*_enterica_Anatum_str._USDA-ARS-USMARC-1765]
28 ADV68409.1 [*Deinococcus maricopensis*_DSM_21211]
30 ACL05170.1 [*Desulfatibacillum alkenivorans*_AK-01]
37 AMZ11208.1 [*Salmonella enterica*_enterica_Anatum_str._USDA-ARS-USMARC-1728]
30 AND37944.1 [*Bacillus oceanisediminis*_2691]
37 ALU82184.1 [*Listeria monocytogenes*]
37 KXB88689.1 [*Veillonella dispar*]
37 KXB85585.1 [*Veillonella parvula*]
37 KXB82054.1 [*Varibaculum cambriense*]
37 KXB73216.1 [*Peptostreptococcus anaerobius*]
30 KXB45491.1 [*Citrobacter koseri*]
37 KXB61404.1 [*Leptotrichia wadei*]
37 KXA67059.1 [*Cutibacterium avidum*]
37 KXA64523.1 [*Veillonella atypica*]
30 KXA06459.1 [*Citrobacter koseri*]
37 KXA03004.1 [*Clostridium perfringens*]
40 KWZ85402.1 [*Bacillus coagulans*]
37 KWZ74493.1 [*Actinomyces neuii*]
28 GAE58782.1 [*Xanthomonas arboricola*_pv._pruni_MAFF_301427]
41 EIM29599.1 [*Microvirga lotononidis*]
60 ADR36146.1 [*Oceanithermus profundus*_DSM_14977]
28 AKB06715.1 [*Vibrio cholerae*]
30 AJJ35492.1 [*Yersinia kristensenii*]
37 AJI69363.1 [*Francisella tularensis*_subsp._*tularensis*_SCHU_S4]
37 AJI66878.1 [*Francisella tularensis*_subsp._*holarctica*]
23 EGW22096.1 [*Methylobacter tundripaludum*_SV96]
70 EIW00571.1 [*Thermoanaerobacter siderophilus*_SR4]
28 EHY89476.1 [*Saccharomonospora azurea*_NA-128]

28 EHR63782.1 [*Saccharomonospora_cyanea*_NA-134]
35 EHQ87806.1 [*Desulfosporosinus_youngiae*_DSM_17734]
25 EHQ15578.1 [*Shewanella_baltica*_OS183]
36 KIY07823.1 [*Burkholderia_mallei*]
30 AHB10872.1 [*Zymomonas_mobilis*_subsp._*mobilis*_str._CP4_=_NRRL_B-14023]
37 ADW17682.1 [*Desulfobulbus_propionicus*_DSM_2032]
58 AER66880.1 [*Thermovirga_lienii*_DSM_17291]
70 AEH44909.1 [*Thermodesulfatator_indicus*_DSM_15286]
37 AEB09977.1 [*Desulfobacca_acetoxidans*_DSM_11109]
50 AEE14257.1 [*Thermodesulfobium_narugense*_DSM_14796]
70 AEB11312.1 [*Marinithermus_hydrothermalis*_DSM_14884]
28 ADY56644.1 [*Syntrophobotulus_glycolicus*_DSM_8271]
30 ADX68316.1 [*Weeksella_virosa*_DSM_16922]
75 ADU51534.1 [*Thermaerobacter_marianensis*_DSM_12885]
26 AIT05447.1 [*Sphingomonas_taxi*]
24 ADN09900.1 [*Sulfurimonas_autotrophica*_DSM_16294]
50 ADH62957.1 [*Meiothermus_silvanus*_DSM_9946]
28 EFH87731.1 [*Ktedonobacter_racemifer*_DSM_44963]
30 ADY25367.1 [*Deinococcus_proteolyticus*_MRP]
70 ADQ40935.1 [*Caldicellulosiruptor_kristjanssonii*_I77R1B]
37 ADY34043.1 [*Odoribacter_splanchnicus*_DSM_20712]
28 EUJ10237.1 [*Methylophilaceae_bacterium_11*]
75 AFH38428.1 [*Thermus_thermophilus*_JL-18]
70 AFV75405.1 [*Thermus_oshimai*_JL-2]
70 EED11250.1 [*Thermus_aquaticus*_Y51MC23]
70 APD08922.1 [*Thermus_brockianus*]
36 AJF02165.1 [*Mycobacterium_tuberculosis*_H37RvSiena]
32 BAZ93959.1 [*Thiohalobacter_thiocyanaticus*]

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Opt. Temp. Growth (°C)	Accession_number_PDB	Species
30	1AO0	Bacillus subtilis
37	1ECF	Escherichia coli

GPAT. Archaea. List of genes and optimum growth temperatures

Opt. Temp.	Growth (°C)	Accession_number_and_Species
37		EJG08245.1 [Methanofollis liminatans_DSM_4140]
30		EHQ35559.1 [Methanoplanus limicola_DSM_2279]
37		ADE35893.1 [Methanohalophilus mahii_DSM_5219]
90		ADN49979.1 [Vulcanisaeta distributa_DSM_14429]
92		ADM27115.1 [Ignisphaera aggregans_DSM_17230]
83		ADP77180.1 [Methanothermus fervidus_DSM_2088]
75		AEA47242.1 [Archaeoglobus veneficus_SNP6]
70		EHP85562.1 [Methanotorris formicicus_Mc-S-70]
90		AFL66391.1 [Desulfurococcus amylolyticus_DSM_16532]
92		ADM27114.1 [Ignisphaera aggregans_DSM_17230]
37		ADN37401.1 [Methanolacinia petrolearia_DSM_11571]
45		AEH61214.1 [Methanosalsum zhilinae_DSM_4017]
97		AAL80278.1 [Pyrococcus furiosus_DSM_3638]
25		ETA67047.1 [Methanolobus tindarius_DSM_2278]
29		EHP68719.1 [Metallosphaera yellowstonensis_MK1]
28		ACL15768.1 [Methanosphaerula palustris_E1-9c]
75		ADX82816.1 [Sulfolobus islandicus_HVE10/4]
36		ABS54619.1 [Methanoregula boonei_6A8]
75		ADX82815.1 [Sulfolobus islandicus_HVE10/4]
37		ADE04206.1 [Haloferax volcanii_DS2]
37		ADD04744.1 [Natrialba magadii_ATCC_43099]
40		KQB36740.1 [Acidiplasma aeolicum]
55		KQB35509.1 [Acidiplasma cupricumulans]
50		ADI73116.1 [Methanohalobium evestigatum_Z-7303]
37		ABX02336.1 [Methanococcus maripaludis_C6]
70		ADD09196.1 [Aciduliprofundum boonei_T469]
85		ADC65987.1 [Ferroglobus placidus_DSM_10642]
37		ADB61534.1 [Haloterrigena turkmenica_DSM_5511]
80		ACX72222.1 [Methanocaldococcus vulcanius_M7]
85		ACV24300.1 [Methanocaldococcus fervens_AG86]
30		ACM57065.1 [Halorubrum lacusprofundi_ATCC_49239]
35		ABR54375.1 [Methanococcus vanniellii_SB]
37		ABO34754.1 [Methanococcus maripaludis_C5]
28		ABN56162.1 [Methanoculleus marisnigri_JR1]
90		ADN49980.1 [Vulcanisaeta distributa_DSM_14429]
85		ADB58053.1 [Archaeoglobus profundus_DSM_5631]
35		ADI36027.1 [Methanococcus voltae_A3]
85		ADG13026.1 [Methanocaldococcus infernus_ME]
70		ACX91911.1 [Sulfolobus solfataricus_98/2]
37		ABR65465.1 [Methanococcus maripaludis_C7]
40		ABR55881.1 [Methanococcus aeolicus_Nankai-3]
90		CCE69597.1 [Pyrococcus abyssi_GE5]
30		PAV13552.1 [Methanosarcina spelaei]
35		PAV08642.1 [Methanocorpusculum parvum]
35		PAV08637.1 [Methanocorpusculum parvum]
37		PAV07091.1 [Methanosphaera cuniculi]
37		PAV06251.1 [Methanobacterium bryantii]
31.5		AGB01133.1 [Methanoregula formicica_SMSP]
85		ACB40826.1 [Pyrobaculum neutrophilum_V24Sta]

85 ACB40819.1 [Pyrobaculum_neutrophilum_V24Sta]
85 WP_088853670.1 [Thermococcus_pacificus]
75 ADX85444.1 [Sulfolobus_islandicus_REY15A]
80 ARM76262.1 [Acidianus_manzaensis]
80 ARM76261.1 [Acidianus_manzaensis]
100 AMM53159.1 [Pyrococcus_kukulkanii]
36 BAI62354.1 [Methanocella_paludicola_SANAE]
80 BAD84400.1 [Thermococcus_kodakarensis_KOD1]
70 SAI84180.1 [Sulfolobus_solfataricus]
85 WP_062387766.1 [Thermococcus_peptonophilus]
88 WP_062372122.1 [Thermococcus_guaymasensis]
85 ALM76321.1 [Thermococcus_barophilus]
85 AMQ18195.1 [Thermococcus_peptonophilus]
88 AJC71945.1 [Thermococcus_guaymasensis_DSM_11113]
78 KUK18077.1 [Thermococcus_sibiricus]
80 WP_058939691.1 [Thermococcus_celericrescens]
85 WP_056934730.1 [Thermococcus_barophilus]
50 AFD01075.1 [Methanocella_conradii_HZ254]
40 KPV46378.1 [Acidiplasma_aeolicum]
80 AFL94998.1 [Thermococcus_cleftensis]
80 AIF68565.1 [Palaeococcus_pacificus_DY20341]
85 WP_050001967.1 [Thermococcus_eurythermalis]
85 AIU68983.1 [Thermococcus_eurythermalis]
37 ADQ66777.1 [Halogeometricum_borinquense_DSM_11551]
88 WP_048811074.1 [Thermococcus_gammatolerans]
95 WP_048053066.1 [Pyrococcus_horikoshii]
37 AGB31296.1 [Natrinema_pellirubrum_DSM_15624]
37 AGB48961.1 [Methanomethylovorans_hollandica_DSM_15978]
83 EHR78953.1 [Thermococcus_litoralis_DSM_5473]
65 AEH06237.1 [Methanothermococcus_okinawensis_IH1]
35 AKB54280.1 [Methanosarcina_barkeri_MS]
35 AKB57641.1 [Methanosarcina_barkeri_227]
37 AKB44441.1 [Methanosarcina_vacuolata_Z-761]
30 AKB84409.1 [Methanococcoides_methylutens_MM1]
35 AKB82028.1 [Methanosarcina_barkeri_3]
37 AKB79529.1 [Methanosarcina_horonobensis_HB-1_=_JCM_15518]
25 AKB75657.1 [Methanosarcina_lacustris_Z-7289]
37 AKB70852.1 [Methanosarcina_mazei_C16]
37 AKB67501.1 [Methanosarcina_mazei_LYC]
37 AKB64156.1 [Methanosarcina_mazei_S-6]
37 AKB60899.1 [Methanosarcina_mazei_SarPi]
37 AKB39939.1 [Methanosarcina_mazei_WWM610]
37 AKB37833.1 [Methanosarcina_siciliae_C2J]
37 AKB27838.1 [Methanosarcina_siciliae_T4/M]
37 AKB31762.1 [Methanosarcina_siciliae_HI350]
50 AKB16521.1 [Methanosarcina_thermophila_CHTI-55]
50 AKB12858.1 [Methanosarcina_thermophila_TM-1]
45 CAJ35223.1 [Methanocella_arvoryzae_MRE50]
37 AIM28104.1 [Metallosphaera_sedula]
85 AIG97747.1 [Archaeoglobus_fulgidus_DSM_8774]
42 AIC14836.1 [Nitrososphaera_viennensis_EN76]
98 AEH23782.1 [Pyrococcus_yyanosii_CH1]

85 ADT85007.1 [Thermococcus_barophilus_MP]
97 AFN04422.1 [Pyrococcus_furiosus_COM1]
78 ACS89134.1 [Thermococcus_sibiricus_MM_739]
55 AAT43254.1 [Picophilus_torridus_DSM_9790]
37 AAM30037.1 [Methanosarcina_mazei_Go1]
65 ABP96121.1 [Metallosphaera_sedula_DSM_5348]
90 ABU82082.1 [Ignicoccus_hospitalis_KIN4/I]
95 ABP51736.1 [Pyrobaculum_arsenaticum_DSM_13514]