## Core Genome of Deinococcota Phylum from 72 Strains Across 40 Species Consist of Only One Gene, Beta Subunit of DNA-Directed RNA Polymerase – Supplementary Materials

Label	Organism Name	Strain	Replicons
Asi_DSM_9946	Allomeiothermus silvanus	DSM 9946	chromosome:NC_014212.1/CP002042.1; plasmid pMESIL01:NC_014213.1/CP002043.1; plasmid pMESIL02:NC_014214.1/CP002044.1
Dac_BM2	Deinococcus actinosclerus	BM2	chromosome:NZ_CP013910.1/CP013910.1
Dac_SJTR	Deinococcus actinosclerus	SJTR	chromosome:NZ_CP029774.1/CP029774.1; plasmid unnamed1:NZ_CP029775.1/CP029775.1; plasmid unnamed2:NZ_CP029776.1/CP029776.1; plasmid unnamed3:NZ_CP029777.1/CP029777.1; plasmid unnamed4:NZ_CP029778.1/CP029778.1
Daq_PB-314	Deinococcus aquaticus	PB-314	chromosome:CP115165.1; plasmid pDATS01:CP115166.1; plasmid pDATS02:CP115167.1; plasmid pDATS03:CP115168.1; plasmid pDATS04:CP115169.1
Dde_VCD115	Deinococcus deserti	VCD115	chromosome:NC_012526.1/CP001114.1; plasmid 1:NC_012527.1/CP001115.1; plasmid 2:NC_012529.1/CP001116.1; plasmid 3:NC_012528.1/CP001117.1
Dfi_CC-FR2-10	Deinococcus ficus	CC-FR2-10	chromosome:NZ_CP021081.1/CP021081.1; plasmid pDFI1:NZ_CP021082.1/CP021082.1; plasmid pDFI2:NZ_CP021083.1/CP021083.1; plasmid pDFI3:NZ_CP021084.1/CP021084.1; plasmid pDFI4:NZ_CP021085.1/CP021085.1
Dge_DSM_11300	Deinococcus geothermalis	DSM 11300	chromosome:NC_008025.1/CP000359.1; plasmid pDGEO01:NC_008010.2/CP000358.2; plasmid pDGEO02:NC_009939.1/CP000856.1
Dgo_I-0	Deinococcus gobiensis	I-0	chromosome:NC_017790.1/CP002191.1; plasmid P1:NC_017805.1/CP002192.1; plasmid P2:NC_017791.1/CP002193.1; plasmid P3:NC_017771.1/CP002194.1; plasmid P4:NC_017792.1/CP002195.1; plasmid P5:NC_017806.1/CP002196.1; plasmid P6:NC_017793.1/CP002197.1
Dgr_ATCC43672	Deinococcus grandis	ATCC 43672	chromosome:AP021849.1; plasmid pDEGR- 1:AP021850.1; plasmid pDEGR- 2:AP021851.1; plasmid pDEGR- 3:AP021852.1
Dir_17bor-2	Deinococcus irradiatisoli	17bor-2	chromosome:NZ_CP029494.1/CP029494.1
Dma_DSM_21211	Deinococcus maricopensis	DSM 21211	chromosome:NC_014958.1/CP002454.1
Dpe_DSM_19664	Deinococcus peraridilitoris	DSM 19664	chromosome:NC_019793.1/CP003382.1; plasmid pDEIPE01:NC_019789.1/CP003383.1;

			plasmid
Dpr_MRP	Deinococcus proteolyticus	MRP	pDEIPE02:NC_019790.1/CP003384.1 chromosome:NC_015161.1/CP002536.1; plasmid pDEIPR01:NC_015169.1/CP002537.1; plasmid pDEIPR02:NC_015162.1/CP002538.1; plasmid pDEIPR03:NC_015170.1/CP002539.1; plasmid pDEIPR04:NC_015163.1/CP002540.1
Dps_S14-83	Deinococcus psychrotolerans	S14-83	chromosome 1:NZ_CP034183.1/CP034183.1; chromosome 2:NZ_CP034184.1/CP034184.1; plasmid unnamed1:NZ_CP034185.1/CP034185.1; plasmid unnamed2:NZ_CP034186.1/CP034186.1; plasmid unnamed3:NZ_CP034187.1/CP034187.1; plasmid unnamed4:NZ_CP034188.1/CP034188.1; plasmid unnamed4:NZ_CP034188.1/CP034188.1; plasmid unnamed5:NZ_CP034189.1/CP034189.1
Dpu_DY1	Deinococcus puniceus	DY1	chromosome:NZ_CP011387.1/CP011387.1
Dra_BND54	Deinococcus radiodurans	BND-54	chromosome 1:NZ_CP050120.1/CP050120.1; chromosome 2:NZ_CP050121.1/CP050121.1; plasmid pCP1:NZ_CP050123.1/CP050123.1; plasmid pMP1:NZ_CP050122.1/CP050122.1
Dra_BNK50	Deinococcus radiodurans	BNK-50	chromosome 1:NZ_CP050116.1/CP050116.1; chromosome 2:NZ_CP050117.1/CP050117.1; plasmid pCP1:NZ_CP050119.1/CP050119.1; plasmid pMP1:NZ_CP050118.1/CP050118.1
Dra_BRD125	Deinococcus radiodurans	BRD125	chromosome 1:CP094462.1; chromosome 2:CP094463.1; plasmid p1_BRD125:CP094464.1; plasmid p2_BRD125:CP094465.1
Dra_R1_dM1	Deinococcus radiodurans	R1 dM1	chromosome I:NZ_CP031500.1/CP031500.1; chromosome II:NZ_CP031501.1/CP031501.1; plasmid pMP1:NZ_CP031502.1/CP031502.1; plasmid pSP1:NZ_CP031503.1/CP031503.1
Dra_ATCC_13939	Deinococcus radiodurans	ATCC 13939	chromosome I:NZ_CP038663.1/CP038663.1; chromosome II:NZ_CP038664.1/CP038664.1; plasmid pCP1:NZ_CP038666.1/CP038666.1; plasmid pMP1:NZ_CP038665.1/CP038665.1
Dra_R1	Deinococcus radiodurans	R1	chromosome I:NZ_CP068791.1/CP068791.1; chromosome II:NZ_CP068792.1/CP068792.1; plasmid pCP1:NZ_CP068794.1/CP068794.1; plasmid pMP1:NZ_CP068793.1/CP068793.1
Dra_ATCC_27603	Deinococcus radiophilus	ATCC 27603	chromosome:NZ_CP086380.1/CP086380.1; plasmid pRadio1:NZ_CP086381.1/CP086381.1; plasmid pRadio2:NZ_CP086382.1/CP086382.1; plasmid pRadio3:NZ_CP086384.1/CP086384.1; plasmid pRadio4:NZ_CP086383.1/CP086383.1; plasmid pRadio5:NZ_CP086385.1/CP086385.1;

			plasmid
			pRadio6:NZ_CP086386.1/CP086386.1
Dra_DY59	Deinococcus radiopugnans	DY59	chromosome:NZ_CP010028.1/CP010028.1
Dru_Ant6	Deinococcus rubellus	Ant6	chromosome:NZ_CP104213.1/CP104213.1
Dso_N5	Deinococcus soli	N5	chromosome:NZ_CP011389.1/CP011389.1
Dsp_AJ005	Deinococcus sp. AJ005	AJ005	chromosome:NZ_CP044990.1/CP044990.1; plasmid p17k:NZ_CP044988.1/CP044988.1; plasmid p96k:NZ_CP044987.1/CP044987.1; plasmid p115k:NZ_CP044991.1/CP044991.1; plasmid p380k:NZ_CP044989.1/CP044989.1
Dsp_D7000	Deinococcus sp. D7000	D7000	chromosome:CP058534.1; plasmid p_1:CP058535.1; plasmid p_2:CP058536.1; plasmid p_3:CP058537.1; plasmid p_4:CP058538.1; plasmid p_5:CP058539.1; plasmid p_6:CP058540.1; plasmid p_7:CP058541.1; plasmid p_8:CP058542.1; plasmid p_9:CP058543.1
Dsp_KNUC1210	Deinococcus sp. KNUC1210	KNUC1210	chromosome:NZ_CP092190.1/CP092190.1; plasmid unnamed1:NZ_CP092187.1/CP092187.1; plasmid unnamed2:NZ_CP092188.1/CP092188.1; plasmid unnamed3:NZ_CP092189.1/CP092189.1; plasmid unnamed4:NZ_CP092191.1/CP092191.1; plasmid unnamed5:NZ_CP092192.1/CP092192.1; plasmid unnamed6:NZ_CP092193.1/CP092193.1; plasmid unnamed7:NZ_CP092194.1/CP092194.1; plasmid unnamed8:NZ_CP092195.1/CP092195.1; plasmid unnamed9:NZ_CP092196.1/CP092196.1; plasmid unnamed9:NZ_CP092186.1/CP092186.1
Dsp_QL22	Deinococcus sp. QL22	QL22	chromosome:NZ_CP097149.1/CP097149.1; plasmid unnamed2:NZ_CP097152.1/CP097152.1; plasmid unnamed3:NZ_CP097153.1/CP097153.1; plasmid unnamed4:NZ_CP097151.1/CP097151.1; plasmid unnamed5:NZ_CP097150.1/CP097150.1; plasmid unnamed6:NZ_CP097154.1/CP097154.1; plasmid unnamed7:NZ_CP097157.1/CP097157.1; plasmid unnamed8:NZ_CP097156.1/CP097156.1; plasmid unnamed9:NZ_CP097155.1/CP097155.1; plasmid unnamed9:NZ_CP097155.1/CP097155.1; plasmid unnamed10:NZ_CP097158.1/CP097158.1;

			plasmid
			unnamed11:NZ_CP097159.1/CP097159.1
			chromosome:NZ_CP083455.1/CP083455.1;
Dsp_TS-293	Deinococcus sp. TS-293	TS-293	plasmid p_TS293_2:NZ_CP083456.1/CP083456.1; plasmid p_TS293_3:NZ_CP083457.1/CP083457.1; plasmid p_TS293_4:NZ_CP083458.1/CP083458.1; plasmid p_TS293_5:NZ_CP083459.1/CP083459.1; plasmid p_TS293_6:NZ_CP083460.1/CP083460.1
Dwu_NEB_479	Deinococcus wulumuqiensis	NEB 479	chromosome:NZ_CP031158.1/CP031158.1; plasmid pDrdA:NZ_CP031159.1/CP031159.1; plasmid pDrdB:NZ_CP031160.1/CP031160.1; plasmid pDrdI:NZ_CP031163.1/CP031163.1; plasmid pDrdII:NZ_CP031161.1/CP031161.1; plasmid pDrdIV:NZ_CP031162.1/CP031162.1; plasmid pDrdVI:NZ_CP031164.1/CP031164.1
Dwu_R12	Deinococcus wulumuqiensis	R12	chromosome:NZ_CP049357.1/CP049357.1; plasmid unnamed1:NZ_CP049358.1/CP049358.1; plasmid unnamed2:NZ_CP049359.1/CP049359.1; plasmid unnamed3:NZ_CP049360.1/CP049360.1; plasmid unnamed4:NZ_CP049361.1/CP049361.1
Mhy_DSM_14884	Marinithermus hydrothermalis	DSM 14884	chromosome:NC_015387.1/CP002630.1
Mru_DSM_1279	Meiothermus ruber	DSM 1279	chromosome:NC_013946.1/CP001743.1
Mta_WR-220	Meiothermus taiwanensis	WR-220	chromosome:NZ_CP021130.1/CP021130.1; plasmid pMtWR- 220:NZ_CP021131.1/CP021131.1
Opr_DSM_14977	Oceanithermus profundus	DSM 14977	chromosome:NC_014761.1/CP002361.1; plasmid pOCEPR01:NC_014753.1/CP002362.1
Tha_JCM_19900	Thermus antranikianii	JCM 19900	chromosome:NZ_CP046617.1/CP046617.1
Tha_RBS10-92	Thermus antranikianii	RBS10-92	chromosome:CP076325.1
Taq_Y51MC23	Thermus aquaticus	Y51MC23	chromosome:NZ_CP010822.1/CP010822.1; plasmid pTA14:NZ_CP010823.1/CP010823.1; plasmid pTA16:NZ_CP010824.1/CP010824.1; plasmid pTA69:NZ_CP010825.1/CP010825.1; plasmid pTA78:NZ_CP010826.1/CP010826.1
Tbr_GE-1	Thermus brockianus	GE-1	chromosome:NZ_CP016312.1/CP016312.1; plasmid pTB1:NZ_CP016313.1/CP016313.1; plasmid pTB2:NZ_CP016314.1/CP016314.1
Tbr_SNM4-1	Thermus brockianus	SNM4-1	chromosome:NZ_AP025593.1/AP025593.1; plasmid pTbrSNM4-

			1b.N/7 A D025504 1/A D025504 1. plasmid
			1b:NZ_AP025594.1/AP025594.1; plasmid pTbrSNM4-1c:NZ_AP025595.1/AP025595.1
Tos_JL-2	Thermus oshimai	JL-2	pTbfSNM4-1C:NZ_AP023393.17AP023393.1 chromosome:NC_019386.1/CP003249.1; plasmid pTHEOS01:NC_019387.1/CP003250.1; plasmid pTHEOS02:NC_019388.1/CP003251.1
Tpa_RL	Thermus parvatiensis	RL	chromosome:NZ_CP014141.1/CP014141.1; plasmid pTP143:NZ_CP014142.1/CP014142.1
Tsc_SA-01	Thermus scotoductus	SA-01	chromosome:NC_014974.1/CP001962.1; plasmid pTSC8:NC_014975.1/CP001963.1
Tsp_CCB_US3_UF	Thermus sp. CCB_US3_UF1	CCB_US3_UF	chromosome:NC_017278.1/CP003126.1; plasmid pTCCB09:NC_016634.1/CP003127.1
Tsp_NEB1569	Thermus sp. NEB1569	NEB1569	chromosome:NZ_CP092445.1/CP092445.1; plasmid unnamed1:NZ_CP092444.1/CP092444.1; plasmid unnamed2:NZ_CP092443.1/CP092443.1
Tsp_PS18	Thermus sp. PS18	PS18	chromosome:NZ_CP102606.1/CP102606.1; plasmid pPS18:NZ_CP102607.1/CP102607.1
Tth_AA1-1	Thermus thermophilus	AA1-1	chromosome:NZ_AP024926.1/AP024926.1; plasmid pAA1- 1b:NZ_AP024927.1/AP024927.1; plasmid pAA1-1c:NZ_AP024928.1/AP024928.1
Tth_AA2-2	Thermus thermophilus	AA2-2	chromosome:NZ_AP024929.1/AP024929.1; plasmid pAA2- 2b:NZ_AP024930.1/AP024930.1; plasmid pAA2-2c:NZ_AP024931.1/AP024931.1; plasmid pAA2- 2d:NZ_AP024932.1/AP024932.1
Tth_AA2-20	Thermus thermophilus	AA2-20	chromosome:NZ_AP019792.1/AP019792.1; plasmid pAA220:NZ_AP019793.1/AP019793.1
Tth_AA2-29	Thermus thermophilus	AA2-29	chromosome:NZ_AP019794.1/AP019794.1; plasmid pAA229:NZ_AP019795.1/AP019795.1
Tth_AA3-7	Thermus thermophilus	AA3-7	chromosome:NZ_AP024933.1/AP024933.1; plasmid pAA3- 7b:NZ_AP024934.1/AP024934.1; plasmid pAA3-7c:NZ_AP024935.1/AP024935.1; plasmid pAA3- 7d:NZ_AP024936.1/AP024936.1
Tth_AK1	Thermus thermophilus	AK1	chromosome:NZ_AP024937.1/AP024937.1; plasmid pAK1b:NZ_AP024938.1/AP024938.1; plasmid pAK1c:NZ_AP024939.1/AP024939.1
Tth_HB5002	Thermus thermophilus	HB5002	chromosome:NZ_AP024301.1/AP024301.1; plasmid pHB5002b:NZ_AP024302.1/AP024302.1; plasmid pHB5002c:NZ_AP024303.1/AP024303.1; plasmid pHB5002d:NZ_AP024304.1/AP024304.1
Tth_HB5008	Thermus thermophilus	HB5008	chromosome:NZ_AP024305.1/AP024305.1; plasmid pHB5008b:NZ_AP024306.1/AP024306.1; plasmid pHB5008c:NZ_AP024307.1/AP024307.1

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Tth_HB5018			chromosome:NZ_AP024270.1/AP024270.1; plasmid
			pHB5018b:NZ_AP024271.1/AP024271.1;
	Thermus		plasmid
	thermophilus	HB5018	pHB5018c:NZ_AP024272.1/AP024272.1;
	inermophius		plasmid
			pHB5018d:NZ_AP024273.1/AP024273.1; plasmid
			pHB5018e:NZ_AP024274.1/AP024274.1
Tth_HC11	Thermus	HC11	chromosome:NZ_AP019801.1/AP019801.1;
111_11011	thermophilus	11011	plasmid pHC11:NZ_AP019802.1/AP019802.1
Tth_JCM10941	Thermus	JCM10941	chromosome:NZ_AP024984.1/AP024984.1; plasmid pTT8:NZ_AP024986.1/AP024986.1;
Tui_JCW1107+1	thermophilus	JCW110541	plasmid pTT27:NZ_AP024985.1/AP024985.1
			chromosome:NZ_CP082323.1/CP082323.1;
TUL N. 1	Thermus		plasmid
Tth_N-1	thermophilus	N-1	unnamed1:NZ_CP082324.1/CP082324.1; plasmid
			unnamed2:NZ_CP082325.1/CP082325.1
			chromosome:NZ_AP025596.1/AP025596.1;
			plasmid pTthSNM1-
			1b:NZ_AP025597.1/AP025597.1; plasmid pTthSNM1-1c:NZ_AP025598.1/AP025598.1;
m	Thermus		p1thSNM1-1c:NZ_AP025598.1/AP025598.1; plasmid pTthSNM1-
Tth_SNM1-1	thermophilus	SNM1-1	1d:NZ_AP025599.1/AP025599.1; plasmid
			pTthSNM1-1e:NZ_AP025600.1/AP025600.1;
			plasmid pTthSNM1- 1f:NZ_AP025601.1/AP025601.1; plasmid
			pTthSNM1-1g:NZ_AP025602.1/AP025602.1
			chromosome:NZ_AP025603.1/AP025603.1;
	Thermus	SNM1-7	plasmid pTthSNM1-
			7b:NZ_AP025604.1/AP025604.1; plasmid pTthSNM1-7c:NZ_AP025605.1/AP025605.1;
Tth SNM1-7			plasmid pTthSNM1-
	thermophilus		7d:NZ_AP025606.1/AP025606.1; plasmid
			pTthSNM1-7e:NZ_AP025607.1/AP025607.1;
			plasmid pTthSNM1- 7f:NZ_AP025608.1/AP025608.1
			chromosome:NZ_AP025609.1/AP025609.1;
		SNM3-3	plasmid pTthSNM3-
Tth_SNM3-3	Thermus		3b:NZ_AP025610.1/AP025610.1; plasmid
_	thermophilus		pTthSNM3-3c:NZ_AP025611.1/AP025611.1; plasmid pTthSNM3-
			3d:NZ_AP025612.1/AP025612.1
			chromosome:NZ_AP025613.1/AP025613.1;
	T1		plasmid pTthSNM6-
Tth_SNM6-6	Thermus thermophilus	SNM6-6	6b:NZ_AP025614.1/AP025614.1; plasmid pTthSNM6-6c:NZ_AP025615.1/AP025615.1;
	теторииз		plasmid pTthSNM6-
			6d:NZ_AP025616.1/AP025616.1
		SNM7-6	chromosome:NZ_AP025617.1/AP025617.1;
	Thermus thermophilus		plasmid pTthSNM7- 6b:NZ_AP025618.1/AP025618.1; plasmid
Tth_SNM7-6			pTthSNM7-6c:NZ_AP025619.1/AP025619.1;
			plasmid pTthSNM7-
	T!		6d:NZ_AP025620.1/AP025620.1
Tth_TMY	Thermus thermophilus	TMY	chromosome:NZ_AP025158.1/AP025158.1; plasmid pTMY:NZ_AP025159.1/AP025159.1
Tth TTINIAD1	Thermus	TTIINIA D 1	chromosome 1:NZ_LR027517.1/LR027517.1;
Tth_TTHNAR1	thermophilus	TTHNAR1	plasmid 2:NZ_LR027518.1/LR027518.1;

			plasmid 3:NZ_LR027519.1/LR027519.1; plasmid 4:NZ_LR027520.1/LR027520.1
Tth_TMY	Thermus thermophilus	TMY	chromosome:AP017920.1; plasmid pTMY:AP017921.1
Tth_HB27	Thermus thermophilus	HB27	chromosome:NC_005835.1/AE017221.1; plasmid pTT27:NC_005838.1/AE017222.1
Tth_HB8	Thermus thermophilus	НВ8	chromosome 1:NC_006461.1/AP008226.1; plasmid pTT8:NC_006463.1/AP008228.1; plasmid pTT27:NC_006462.1/AP008227.1
Tth_JL-18	Thermus thermophilus	JL-18	chromosome:NC_017587.1/CP003252.1; plasmid pTTJL1801:NC_017588.1/CP003253.1; plasmid pTTJL1802:NC_017590.1/CP003254.1
Tth_SG0.5JP17-16	Thermus thermophilus	SG0.5JP17-16	chromosome:NC_017272.1/CP002777.1; plasmid pTHTHE1601:NC_017273.1/CP002778.1
Tra_DSM_17093	Truepera radiovictrix	DSM 17093	chromosome:NC_014221.1/CP002049.1