

Supplementary Table S4. The bacteria with adjacent *sqr* and *pdo* genes from GenBank

Strains	Genome Ids	SQR	SQR types	PDO	PDO types	first batch*
Bacillus cereus 03BB102	CP001407	ACO26823	II	ACO26974	III	No
		ACO26468	II	ACO31190	III	No
Bacillus cereus 03BB102	CP009318	AJG52892	II	AJG54117	III	No
		AJG54980	II	AJG55703	III	No
Bacillus cereus 03BB108	CP009641	AJI12952	II	AJI13187	III	No
		AJI10307	II	AJI09584	III	No
Bacillus cereus F837/76	CP003187	AEW55666	II	AEW55667	III	Yes
		AEW56314	II	AEW56313	III	Yes
Burkholderia cenocepacia	CP011917	ALV55629	II	ALV55628	II	Yes
		ALV57497	II	ALV57498	II	Yes
Bacillus thuringiensis	CP009600	AJH69161	II	AJH67770	III	No
		AJH67137	II	AJH71305	III	No
Bacillus thuringiensis str. Al Hakam	CP000485	ABK85581	II	ABK85582	III	Yes
		ABK86182	II	ABK86181	III	Yes
Cupriavidus metallidurans CH34	CP000352	ABF09250	II	ABF09249	II	Yes
		CP000353	ABF12209	II	ADC45300	II
Mycobacterium chubuense NBB4	CP003053	AFM18110	II	AFM18109	III	Yes
		CP003054	AFM20298	II	AFM20299	III
Mycobacterium vanbaalenii PYR-1	CP000511	ABM12653	II	ABM12652	III	Yes
		ABM14799	II	ABM14800	III	Yes
Pseudomonas putida ND6	CP003588	AFK67141	II	AFK67140	II	Yes
		AFK69513	II	AFK69512	II	Yes
Staphylococcus aureus subsp. aureus ST228	HE579061	CCJ11992	II	CCJ11991	III	No
		HE579063	CCJ13957	II	CCJ13956	III
Streptomyces sp. CdTB01	CP013743	ALV38387	II	ALV31520	III	No
		ALV32260	II	ALV32261	III	Yes
Burkholderia cenocepacia H111	HG938370	CDN60258	II	CDN60257	II	Yes
		CDN60259	II		II	Yes

Acidithiobacillus caldus SM-1	CP002573	AEK59248	VI	AEK59246	I	Yes
Acidithiobacillus ferrooxidans ATCC 53993	CP001132	ACH82698	VI	ACH82700	I	Yes
Acinetobacter baumannii	AP014649	BAP66727	II	BAP66728	I	Yes
Acinetobacter baumannii	CP007535	AIA51787	II	AIA51788	I	Yes
Acinetobacter baumannii	CP008706	AKA31851	II	AKA31852	I	Yes
Acinetobacter baumannii	CP009256	AIL75603	II	AIL75602	I	Yes
Acinetobacter baumannii	CP009257	AIL80701	II	AIL80700	I	Yes
Acinetobacter baumannii	CP009534	AIS06446	II	AIS06445	I	Yes
Acinetobacter baumannii	CP010397	AJB66950	II	AJB66951	I	Yes
Acinetobacter baumannii	CP010779	AKJ45814	II	AKJ45815	I	Yes
Acinetobacter baumannii	CP010781	AJF81747	II	AJF81746	I	Yes
Acinetobacter baumannii	CP012004	AKQ26932	II	AKQ26933	I	Yes
Acinetobacter baumannii	CP012006	AKQ30647	II	AKQ30648	I	Yes
Acinetobacter baumannii	CP012952	ALJ87936	II	ALJ87937	I	Yes
Acinetobacter baumannii	CP013924	ALX99599	II	ALX99600	I	Yes
Acinetobacter baumannii	CP014215	AMC15402	II	AMC15401	I	Yes
Acinetobacter baumannii	CP014528	AMN01507	II	AMN01506	I	Yes
Acinetobacter baumannii	CP014538	AML63693	II	AML63694	I	Yes
Acinetobacter baumannii	CP014539	AML67180	II	AML67181	I	Yes
Acinetobacter baumannii	CP014540	AML70860	II	AML70861	I	Yes
Acinetobacter baumannii	CP014541	AML74417	II	AML74418	I	Yes
Acinetobacter baumannii	LN865143	CRL94455	II	CRL94454	I	Yes
Acinetobacter baumannii	LN868200	CRX64777	II	CRX64778	I	Yes
Acinetobacter baumannii	LN997846	CUW35137	II	CUW35136	I	Yes
Acinetobacter baumannii 1656-2	CP001921	ADX03837	II	ADX03836	I	Yes
Acinetobacter baumannii AB0057	CP001182	ACJ41312	II	ACJ41311	I	Yes
Acinetobacter baumannii AC30	CP007577	AHX64508	II	AHX64507	I	Yes
Acinetobacter baumannii ACICU	CP000863	ACC57056	II	ACC57055	I	Yes
Acinetobacter baumannii ATCC 17978	CP000521	ABO12136	II	ABO12135	I	Yes
Acinetobacter baumannii AYE	CU459141	CAM86818	II	CAM86819	I	Yes
Acinetobacter baumannii BJAB07104	CP003846	AGQ14375	II	AGQ14376	I	Yes
Acinetobacter baumannii BJAB0715	CP003847	AGQ06574	II	AGQ06573	I	Yes

<i>Acinetobacter baumannii</i> BJAB0868	CP003849	AGQ10416	II	AGQ10415	I	Yes
<i>Acinetobacter baumannii</i> D1279779	CP003967	AGH35586	II	AGH35585	I	Yes
<i>Acinetobacter baumannii</i> LAC-4	CP007712	AIY37910	II	AIY37909	I	Yes
<i>Acinetobacter baumannii</i> MDR-TJ	CP003500	AFI95567	II	AFI95568	I	Yes
<i>Acinetobacter baumannii</i> MDR-ZJ06	CP001937	AEP06369	II	AEP06368	I	Yes
<i>Acinetobacter baumannii</i> NCGM 237	AP013357	BAN87727	II	BAN87728	I	Yes
<i>Acinetobacter baumannii</i> TCDC-AB0715	CP002522	ADX92386	II	ADX92385	I	Yes
<i>Acinetobacter baumannii</i> TYTH-1	CP003856	AFU38187	II	AFU38186	I	Yes
<i>Acinetobacter baumannii</i> ZW85-1	CP006768	AHB91462	II	AHB91463	I	Yes
<i>Acinetobacter nosocomialis</i>	CP010368	AJB48327	II	AJB48328	I	Yes
<i>Acinetobacter oleivorans</i> DR1	CP002080	ADI90932	II	ADI90933	I	Yes
<i>Acinetobacter pittii</i>	CP014477	AMM29506	II	AMM29505	I	Yes
<i>Acinetobacter</i> sp. DUT-2	CP014651	AMO40770	II	AMO40771	I	Yes
<i>Alcanivorax borkumensis</i> SK2	AM286690	CAL17390	II	CAL17389	II	Yes
<i>Alcanivorax dieselolei</i> B5	CP003466	AFT69376	II	AFT69377	II	Yes
<i>Alcanivorax</i> sp. NBRC 101098	AP014613	BAP14856	II	BAP14855	II	Yes
<i>Alicyclobacillus acidocaldarius</i> subsp. <i>acidocaldarius</i> DSM 446	CP001727	ACV57440	II	ACV57442	III	Yes
<i>Alteromonas macleodii</i> str. 'Balearic Sea AD45'	CP003873	AFT93568	II	AFT93567	II	Yes
<i>Alteromonas mediterranea</i>	CP013928	AMJ76882	II	AMJ76881	II	Yes
<i>Alteromonas mediterranea</i>	CP013930	AMJ81027	II	AMJ81026	II	Yes
<i>Alteromonas mediterranea</i> 615	CP004846	AGP76509	II	AGP76508	II	Yes
<i>Alteromonas mediterranea</i> DE	CP001103	AEA96234	II	AEA96233	II	Yes
<i>Alteromonas mediterranea</i> DE1	CP003917	AFV83616	II	AFV83615	II	Yes
<i>Alteromonas mediterranea</i> MED64	CP004848	AGP80079	II	AGP80078	II	Yes
<i>Alteromonas mediterranea</i> U7	CP004851	AGP87980	II	AGP87979	II	Yes
<i>Alteromonas mediterranea</i> U8	CP004852	AGP91834	II	AGP91833	II	Yes
<i>Alteromonas mediterranea</i> UM4b	CP004855	AGP99960	II	AGP99959	II	Yes
<i>Alteromonas mediterranea</i> UM7	CP004853	AGP95630	II	AGP95629	II	Yes
<i>Archangium gephyra</i>	CP011509	AKI99197	II	AKI99195	I	Yes
<i>Asaia bogorensis</i> NBRC 16594	AP014690	BAT20392	II	BAT20393	II	Yes
<i>Azotobacter chroococcum</i> NCIMB 8003	CP010415	AJE19978	II	AJE19979	II	Yes
<i>Bacillus amyloliquefaciens</i> CC178	CP006845	AGZ56737	II	AGZ56736	III	Yes

Bacillus amyloliquefaciens subsp. plantarum str. FZB42	CP000560	ABS74338	II	ABS74337	III	Yes
Bacillus anthracis	CP008853	AIM06352	II	AIM06353	III	Yes
Bacillus anthracis	CP008854	AIM11784	II	AIM11785	III	Yes
Bacillus anthracis	CP010792	AJF90102	II	AJF90103	III	Yes
Bacillus anthracis	CP010852	AJM81016	II	AJM81017	III	Yes
Bacillus anthracis	CP014179	AMC04486	II	AMC04487	III	Yes
Bacillus anthracis str. A16	CP001970	AHE89831	II	AHE89832	III	Yes
Bacillus anthracis str. Ames	AE016879	AAP26391	II	AAP26392	III	Yes
Bacillus anthracis str. 'Ames Ancestor'	AE017334	AAT31651	II	AAT31652	III	Yes
Bacillus anthracis str. H9401	CP002091	AFH83800	II	AFH83801	III	Yes
Bacillus anthracis str. Sterne	AE017225	AAT54672	II	AAT54673	III	Yes
Bacillus bombysepticus str. Wang	CP007512	AHX19530	II	AHX19529	III	Yes
Bacillus cereus	CP009686	AKE17831	II	AKE17830	III	Yes
Bacillus cereus	CP011145	ALZ60711	II	ALZ60712	III	Yes
Bacillus cereus ATCC 14579	AE016877	AAP10446	II	AAP10445	III	Yes
Bacillus cereus biovar anthracis str. CI	CP001746	ADK05147	II	ADK05148	III	Yes
Bacillus cereus E33L	CP000001	AAU17982	II	AAU17981	III	Yes
Bacillus cereus FRI-35	CP003747	AFQ12314	II	AFQ12313	III	Yes
Bacillus licheniformis	CP014781	AMR11295	II	AMR11294	III	Yes
Bacillus licheniformis DSM 13 = ATCC 14580	AE017333	AAU41657	II	AAU41656	III	Yes
Bacillus licheniformis DSM 13 = ATCC 14580	CP000002	AAU24294	II	AAU24293	III	Yes
Bacillus paralicheniformis	CP010524	AJO19195	II	AJO19194	III	Yes
Bacillus paralicheniformis ATCC 9945a	CP005965	AGN37231	II	AGN37230	III	Yes
Bacillus subtilis subsp. spizizenii TU-B-10	CP002905	AEP87484	II	AEP87483	III	Yes
Bacillus thuringiensis	CP011349	AKJ61376	II	AKJ61377	III	Yes
Bacillus thuringiensis	CP012100	AKR12538	II	AKR12539	III	Yes
Bacillus thuringiensis	CP013000	ALL23988	II	ALL23989	III	Yes
Bacillus thuringiensis	CP013055	ALL58640	II	ALL58641	III	Yes
Bacillus thuringiensis	CP013274	ALQ68121	II	ALQ68122	III	Yes
Bacillus thuringiensis	CP014283	AMR06056	II	AMR06055	III	Yes
Bacillus thuringiensis BMB171	CP001903	ADH07995	II	ADH07994	III	Yes
Bacillus thuringiensis HD-771	CP003752	AFQ13914	II	AFQ13915	III	Yes

<i>Bacillus thuringiensis</i> HD-789	CP003763	AFQ27142	II	AFQ27141	III	Yes
<i>Bacillus thuringiensis</i> MC28	CP003694	AFU17785	II	AFU17786	III	Yes
<i>Bacillus thuringiensis</i> serovar <i>galleriae</i>	CP010089	AJA20713	II	AJA20712	III	Yes
<i>Bacillus thuringiensis</i> serovar <i>indiana</i>	CP010106	AKR36452	II	AKR36451	III	Yes
<i>Bacillus thuringiensis</i> serovar <i>kurstaki</i> str. HD-1	CP004870	AIE34757	II	AIE34756	III	Yes
<i>Bacillus thuringiensis</i> serovar <i>kurstaki</i> str. HD73	CP004069	AGE79335	II	AGE79334	III	Yes
<i>Bacillus thuringiensis</i> serovar <i>kurstaki</i> str. YBT-1520	CP004858	AHZ52332	II	AHZ52331	III	Yes
<i>Bacillus thuringiensis</i> serovar <i>kurstaki</i> str. YBT-1520	CP007607	AIM30892	II	AIM30893	III	Yes
<i>Bacillus thuringiensis</i> serovar <i>thuringiensis</i> str. IS5056	CP004137	AGG05420	II	AGG05421	III	Yes
<i>Bacillus thuringiensis</i> serovar <i>tolworthi</i>	AP014864	BAR83253	II	BAR83254	III	Yes
<i>Bacillus velezensis</i>	CP009679	AIU82138	II	AIU82137	III	Yes
<i>Bacillus velezensis</i>	CP011346	AKF30870	II	AKF30869	III	Yes
<i>Bacillus velezensis</i> NAU-B3	HG514499	CDH95540	II	CDH95541	III	Yes
<i>Bacillus weihenstephanensis</i>	CP009746	AIW85125	II	AIW85124	III	Yes
<i>Bacillus weihenstephanensis</i> KBAB4	CP000903	ABY43552	II	ABY43553	III	Yes
<i>Brevibacillus laterosporus</i> LMG 15441	CP007806	AIG28390	II	AIG28391	III	Yes
<i>Brevundimonas</i> sp. DS20	CP012897	ALJ07225	II	ALJ07222	II	Yes
<i>Burkholderia ambifaria</i> AMMD	CP000440	ABI87227	II	ABI87226	II	Yes
<i>Burkholderia ambifaria</i> MC40-6	CP001025	ACB64154	II	ACB64153	II	Yes
<i>Burkholderia cenocepacia</i> AU 1054	CP000380	ABF81196	II	ABF81197	II	Yes
<i>Burkholderia cenocepacia</i> HI2424	CP000458	ABK08497	II	ABK08496	II	Yes
<i>Burkholderia cenocepacia</i> J2315	AM747720	CAR52119	II	CAR52118	II	Yes
<i>Burkholderia cenocepacia</i> MC0-3	CP000958	ACA90930	II	ACA90929	II	Yes
<i>Burkholderia cepacia</i>	CP011301	AKE03609	II	AKE03610	II	Yes
<i>Burkholderia cepacia</i> ATCC 25416	CP012981	ALK18752	II	ALK18751	II	Yes
<i>Burkholderia cepacia</i> GG4	CP003774	AFQ48092	II	AFQ48093	II	Yes
<i>Burkholderia contaminans</i>	CP009743	AKM40940	II	AKM40941	II	Yes
<i>Burkholderia gladioli</i> BSR3	CP002599	AEA60868	II	AEA60867	II	Yes
<i>Burkholderia glumae</i> BGR1	CP001503	ACR28753	II	ACR28754	II	Yes
<i>Burkholderia glumae</i> PG1	CP002580	AJK46667	II	AJK46666	II	Yes
<i>Burkholderia lata</i>	CP000151	ABB08638	II	ABB08637	II	Yes
<i>Burkholderia multivorans</i> ATCC 17616	AP009385	BAG43648	II	BAG43647	II	Yes

<i>Burkholderia multivorans</i> ATCC 17616	CP000868	ABX15202	II	ABX15203	II	Yes
<i>Burkholderia plantarii</i>	CP007212	ALK30791	II	ALK30790	II	Yes
<i>Burkholderia pseudomallei</i>	CP010973	AJW53325	II	AJW53324	II	Yes
<i>Burkholderia pseudomallei</i>	CP012041	ALJ70345	II	ALJ70344	II	Yes
<i>Burkholderia pseudomallei</i>	CP012515	ALB93920	II	ALB93919	II	Yes
<i>Burkholderia pseudomallei</i>	CP012517	ALB99989	II	ALB99988	II	Yes
<i>Burkholderia pseudomallei</i>	CP012576	ALC57124	II	ALC57125	II	Yes
<i>Burkholderia pseudomallei</i>	LK936442	CDU28558	II	CDU28557	II	Yes
<i>Burkholderia pseudomallei</i> 1026b	CP002833	AFI66134	II	AFI66135	II	Yes
<i>Burkholderia pseudomallei</i> BPC006	CP003781	AFR16089	II	AFR16088	II	Yes
<i>Burkholderia pseudomallei</i> K96243	BX571965	CAH35561	II	CAH35562	II	Yes
<i>Burkholderia pyrrocinia</i>	CP011503	AKM01359	II	AKM01358	II	Yes
<i>Burkholderia</i> sp. Bp5365	CP013380	ALX42505	II	ALX42506	II	Yes
<i>Burkholderia</i> sp. KJ006	CP003514	AFJ85913	II	AFJ85912	II	Yes
<i>Burkholderia vietnamiensis</i> G4	CP000614	ABO54693	II	ABO54692	II	Yes
<i>Chloroflexus aurantiacus</i> J-10-fl	CP000909	ABY37071	II	ABY37073	III	Yes
<i>Chloroflexus</i> sp. Y-400-fl	CP001364	ACM55565	II	ACM55567	III	Yes
<i>Cupriavidus basilensis</i>	CP010537	AJG24654	II	AJG24655	II	Yes
<i>Emticicia oligotrophica</i> DSM 17448	CP002961	AFK01551	II	AFK01550	III	Yes
<i>Geobacillus kaustophilus</i> HTA426	BA000043	BAD76375	II	BAD76373	III	Yes
<i>Geobacillus</i> sp. C56-T3	CP002050	ADI26444	II	ADI26446	III	Yes
<i>Geobacillus</i> sp. JS12	CP014749	AMQ20869	II	AMQ20867	III	Yes
<i>Geobacillus</i> sp. Y412MC52	CP002442	ADU94456	II	ADU94454	III	Yes
<i>Geobacillus</i> sp. Y412MC61	CP001794	ACX79488	II	ACX79486	III	Yes
<i>Geobacillus stearothermophilus</i> 10	CP008934	ALA71645	II	ALA71647	III	Yes
<i>Glaciecola nitratreducens</i> FR1064	CP003060	AEP29452	I	AEP29454	II	Yes
<i>Glaciecola</i> sp. 4H-3-7+YE-5	CP002527	AEE25387	II	AEE25386	II	Yes
<i>Gluconobacter oxydans</i> 621H	CP000009	AAW60350	II	AAW60351	II	Yes
<i>Gluconobacter oxydans</i> DSM 3504	CP004373	AHK70580	II	AHK70581	II	Yes
<i>Gluconobacter oxydans</i> H24	CP003926	AFW00206	II	AFW00207	II	Yes
<i>Granulibacter bethesdensis</i> CGDNIH1	CP000394	ABI61765	II	ABI61764	II	Yes
<i>Granulibacter bethesdensis</i> CGDNIH2	CP003183	AHJ69411	II	AHJ69413	II	Yes

Granulibacter bethesdensis CGDNIH3	CP003181	AHJ62691	II	AHJ62690	II	Yes
Granulibacter bethesdensis CGDNIH4	CP003182	AHJ66745	II	AHJ66747	II	Yes
Halothiobacillus neapolitanus c2	CP001801	ACX95161	VI	ACX95160	I	Yes
Herbaspirillum rubrisubalbicans M1	CP013737	ALU89685	II	ALU89683	II	Yes
Hyphomicrobium sp. MC1	FQ859181	CCB63325	II	CCB63324	II	Yes
Komagataeibacter medellinensis NBRC 3288	AP012159	BAK83735	II	BAK83734	II	Yes
Komagataeibacter xylinus E25	CP004360	AHI26509	II	AHI26508	II	Yes
Labrenzia sp. CP4	CP011927	AMN55403	II	AMN55402	II	Yes
Lutibacter sp. LP1	CP013355	AMC11673	IV	AMC11670	III	Yes
Marinobacter hydrocarbonoclasticus ATCC 49840	FO203363	CCG93840	II	CCG93841	II	Yes
Marinobacter hydrocarbonoclasticus VT8	CP000514	ABM17483	II	ABM17484	II	Yes
Marinomonas sp. MWYL1	CP000749	ABR69800	II	ABR69801	II	Yes
Meiothermus ruber DSM 1279	CP001743	ADD29595	II	ADD29596	III	Yes
Methylobacillus flagellatus KT	CP000284	ABE50080	II	ABE50081	I	Yes
Methyloceanibacter caenitepidi	AP014648	BAQ16742	II	BAQ16741	II	Yes
Mycobacterium fortuitum	CP011269	ALI27752	II	ALI27751	III	Yes
Mycobacterium gilvum PYR-GCK	CP000656	ABP43469	II	ABP43468	III	Yes
Mycobacterium gilvum Spyr1	CP002385	ADU01731	II	ADU01732	III	Yes
Mycobacterium neoaurum VKM Ac-1815D	CP006936	AHC24477	II	AHC24478	III	Yes
Mycobacterium phlei	CP014475	AMO62305	II	AMO62304	III	Yes
Mycobacterium rhodesiae NBB3	CP003169	AEV74651	II	AEV74650	III	Yes
Mycobacterium sp. EPa45	CP011773	AKK25570	II	AKK25569	III	Yes
Mycobacterium sp. JLS	CP000580	ABO01454	II	ABO01455	III	Yes
Mycobacterium sp. KMS	CP000518	ABL94586	II	ABL94587	III	Yes
Mycobacterium sp. MCS	CP000384	ABG11412	II	ABG11413	III	Yes
Mycobacterium sp. NRRL B-3805	CP011022	AMO05067	II	AMO05068	III	Yes
Mycobacterium sp. VKM Ac-1817D	CP009914	AIY47343	II	AIY47342	III	Yes
Myxococcus fulvus 124B02	CP006003	AKF79095	II	AKF79093	I	Yes
Myxococcus fulvus HW-1	CP002830	AEI63480	II	AEI63482	I	Yes
Myxococcus hansupus	CP012109	AKQ69903	II	AKQ69905	I	Yes
Nitrobacter hamburgensis X14	CP000319	ABE61803	II	ABE61802	II	Yes
Nitrobacter winogradskyi Nb-255	CP000115	ABA04153	II	ABA04154	II	Yes

Nitrosococcus oceani ATCC 19707	CP000127	ABA58468	II	ABA58469	I	Yes
Nitrosococcus watsonii C-113	CP002086	ADJ28667	II	ADJ28668	I	Yes
Novosphingobium sp. PP1Y	FR856862	CCA91153	II	CCA91156	II	Yes
Octadecabacter temperatus	CP012160	AKS47216	II	AKS47214	II	Yes
Paenibacillus larvae subsp. larvae DSM 25430	CP003355	AHD05700	II	AHD05699	III	Yes
Paraburkholderia caribensis	CP013104	ALP67166	II	ALP67165	II	Yes
Paraburkholderia phymatum STM815	CP001045	ACC75280	II	ACC75281	II	Yes
Paraburkholderia xenovorans LB400	CP000271	ABE35279	II	ABE35278	II	Yes
Pasteurella multocida 36950	CP003022	AET16602	II	AET16604	II	Yes
Pasteurella multocida OH1905	CP004392	AKD40424	II	AKD40426	II	Yes
Pasteurella multocida subsp. multocida OH4807	CP004391	AKD39042	II	AKD39044	II	Yes
Pasteurella multocida subsp. multocida PMTB2.1	CP007205	AMM82477	II	AMM82479	II	Yes
Pasteurella multocida subsp. multocida str. 3480	CP001409	AFI46907	II	AFI46909	II	Yes
Pasteurella multocida subsp. multocida str. HB03	CP003328	AHE65101	II	AHE65103	II	Yes
Pasteurella multocida subsp. multocida str. HN06	CP003313	AFF24970	II	AFF24972	II	Yes
Pasteurella multocida subsp. multocida str. Pm70	AE004439	AAK03561	II	AAK03563	II	Yes
Pirellula staleyii DSM 6068	CP001848	ADB15152	II	ADB15150	III	Yes
Pseudohongiella spirulinae	CP013189	ALO47562	II	ALO47561	II	Yes
Pseudomonas alkylphenolia	CP009048	AIL59279	II	AIL59278	II	Yes
Pseudomonas brassicacearum	CP007410	AHL34455	II	AHL34454	II	Yes
Pseudomonas brassicacearum	CP012680	ALQ03330	II	ALQ03331	II	Yes
Pseudomonas brassicacearum subsp. brassicacearum NFM421	CP002585	AEA68791	II	AEA68792	II	Yes
Pseudomonas chlororaphis	CP008696	AIC19534	II	AIC19535	II	Yes
Pseudomonas chlororaphis	CP011110	AKA25088	II	AKA25087	II	Yes
Pseudomonas chlororaphis	CP014867	AMS17443	II	AMS17444	II	Yes
Pseudomonas chlororaphis subsp. aurantiaca	CP009290	AIS13507	II	AIS13506	II	Yes
Pseudomonas citronellolis	CP014158	AMO77168	II	AMO77167	II	Yes
Pseudomonas entomophila L48	CT573326	CAK13004	II	CAK13003	II	Yes
Pseudomonas fluorescens	CP008896	AIG04687	II	AIG04686	II	Yes
Pseudomonas fluorescens	CP012830	ALI04038	II	ALI04039	II	Yes
Pseudomonas fluorescens F113	CP003150	AEV63093	II	AEV63094	II	Yes
Pseudomonas fluorescens NCIMB 11764	CP010945	AKV08462	II	AKV08463	II	Yes

<i>Pseudomonas knackmussii</i> B13	HG322950	CDF85541	II	CDF85540	II	Yes
<i>Pseudomonas mandelii</i> JR-1	CP005960	AHZ68054	II	AHZ68055	II	Yes
<i>Pseudomonas monteilii</i> SB3078	CP006978	AHC85339	II	AHC85338	II	Yes
<i>Pseudomonas monteilii</i> SB3101	CP006979	AHC90707	II	AHC90706	II	Yes
<i>Pseudomonas mosselii</i> SJ10	CP009365	AIN61182	II	AIN61181	II	Yes
<i>Pseudomonas parafulva</i>	CP009747	AIZ34918	II	AIZ34919	II	Yes
<i>Pseudomonas plecoglossicida</i>	CP010359	AJG16646	II	AJG16645	II	Yes
<i>Pseudomonas protegens</i> Cab57	AP014522	BAO61956	II	BAO61957	II	Yes
<i>Pseudomonas protegens</i> CHA0	CP003190	AGL84399	II	AGL84400	II	Yes
<i>Pseudomonas protegens</i> Pf-5	CP000076	AAY91837	II	AAY91838	II	Yes
<i>Pseudomonas putida</i>	CP007620	AHZ74555	II	AHZ74554	II	Yes
<i>Pseudomonas putida</i>	CP014343	AMK28644	II	AMK28643	II	Yes
<i>Pseudomonas putida</i> BIRD-1	CP002290	ADR57791	II	ADR57790	II	Yes
<i>Pseudomonas putida</i> DOT-T1E	CP003734	AFO46736	II	AFO46735	II	Yes
<i>Pseudomonas putida</i> F1	CP000712	ABQ76244	II	ABQ76243	II	Yes
<i>Pseudomonas putida</i> GB-1	CP000926	ABY95985	II	ABY95984	II	Yes
<i>Pseudomonas putida</i> H8234	CP005976	AGN81230	II	AGN81229	II	Yes
<i>Pseudomonas putida</i> HB3267	CP003738	AGA71037	II	AGA71036	II	Yes
<i>Pseudomonas putida</i> KT2440	AE015451	AAN65687	II	AAN65686	II	Yes
<i>Pseudomonas putida</i> NBRC 14164	AP013070	BAN51898	II	BAN51897	II	Yes
<i>Pseudomonas putida</i> S12	CP009974	AJA13492	II	AJA13493	II	Yes
<i>Pseudomonas putida</i> S13.1.2	CP010979	AJQ49776	II	AJQ49777	II	Yes
<i>Pseudomonas putida</i> S16	CP002870	AEJ10605	II	AEJ10604	II	Yes
<i>Pseudomonas putida</i> W619	CP000949	ACA70578	II	ACA70577	II	Yes
<i>Pseudomonas</i> sp. CCOS 191	LN847264	CRI54545	II	CRI54544	II	Yes
<i>Pseudomonas</i> sp. FGI182	CP007012	AHD12177	II	AHD12176	II	Yes
<i>Pseudomonas</i> sp. MRSN12121	CP010892	AJO78082	II	AJO78083	II	Yes
<i>Pseudomonas</i> sp. Os17	AP014627	BAQ74263	II	BAQ74264	II	Yes
<i>Pseudomonas</i> sp. St29	AP014628	BAQ80562	II	BAQ80563	II	Yes
<i>Pseudomonas</i> sp. TKP	CP006852	AHC36802	II	AHC36801	II	Yes
<i>Pseudomonas</i> sp. URMO17WK12:I11	LN854573	CRL52279	II	CRL52280	II	Yes
<i>Pseudomonas</i> sp. URMO17WK12:I11	LN865164	CRN06103	II	CRN06104	II	Yes

<i>Pseudomonas</i> sp. VLB120	CP003961	AGZ32883	II	AGZ32882	II	Yes
<i>Pseudomonas stutzeri</i>	CP002881	AEJ05731	II	AEJ05730	II	Yes
<i>Pseudomonas stutzeri</i>	CP007509	AHY42511	II	AHY42512	II	Yes
<i>Pseudomonas stutzeri</i>	CP011854	AKN26557	II	AKN26558	II	Yes
<i>Pseudomonas stutzeri</i> A1501	CP000304	ABP80175	II	ABP80174	II	Yes
<i>Pseudomonas stutzeri</i> CCUG 29243	CP003677	AFM33909	II	AFM33908	II	Yes
<i>Pseudomonas stutzeri</i> DSM 4166	CP002622	AEA84512	II	AEA84511	II	Yes
<i>Pseudomonas stutzeri</i> RCH2	CP003071	AGA86335	II	AGA86336	II	Yes
<i>Pseudomonas syringae</i> CC1557	CP007014	AHG38780	II	AHG38779	II	Yes
<i>Pseudomonas syringae</i> pv. <i>actinidiae</i> ICMP 18884	CP011972	AKT28026	II	AKT28025	II	Yes
<i>Pseudomonas syringae</i> pv. <i>lapsa</i>	CP013183	ALU58394	II	ALU58393	II	Yes
<i>Pseudomonas syringae</i> pv. <i>syringae</i> B301D	CP005969	AKF43640	II	AKF43639	II	Yes
<i>Pseudomonas syringae</i> pv. <i>syringae</i> B728a	CP000075	AAV35153	II	AAV35152	II	Yes
<i>Pseudomonas syringae</i> pv. <i>syringae</i> HS191	CP006256	AKF48935	II	AKF48934	II	Yes
<i>Pseudomonas syringae</i> pv. <i>tomato</i> str. DC3000	AE016853	AAO53663	II	AAO53664	II	Yes
<i>Pseudomonas syringae</i> UMAF0158	CP005970	ALD98423	II	ALD98422	II	Yes
<i>Ralstonia eutropha</i> JMP134	CP000091	AAZ62946	II	AAZ62947	II	Yes
<i>Rivularia</i> sp. PCC 7116	CP003549	AFY54319	II	AFY54320	I	Yes
<i>Roseibacterium elongatum</i> DSM 19469	CP004372	AHM04687	II	AHM04688	II	Yes
<i>Roseiflexus</i> sp. RS-1	CP000686	ABQ92308	II	ABQ92307	III	Yes
<i>Roseobacter denitrificans</i> OCh 114	CP000362	ABG30463	II	ABG30464	II	Yes
<i>Roseobacter litoralis</i> OCh 149	CP002623	AEI94087	II	AEI94089	II	Yes
<i>Rubinisphaera brasiliensis</i> DSM 5305	CP002546	ADY60095	II	ADY60093	III	Yes
<i>Salinispora arenicola</i> CNS-205	CP000850	ABV98717	II	ABV98718	III	Yes
<i>Salinispora tropica</i> CNB-440	CP000667	ABP54420	II	ABP54419	III	Yes
<i>Sphingopyxis fribergensis</i>	CP009122	AJA09123	II	AJA09120	II	Yes
<i>Sphingopyxis granuli</i>	CP012199	AMG72510	II	AMG72509	II	Yes
<i>Sphingopyxis</i> sp. 113P3	CP009452	ALC14225	II	ALC14226	II	Yes
<i>Sphingorhabdus</i> sp. M41	CP014545	AMO70675	II	AMO70678	II	Yes
<i>Spongiibacter</i> sp. IMCC21906	CP011477	AKH68051	II	AKH68050	II	Yes
<i>Staphylococcus aureus</i>	AP014942	BAS50240	II	BAS50239	III	Yes
<i>Staphylococcus aureus</i>	AP017320	BAU33668	II	BAU33667	III	Yes

Staphylococcus aureus	CP010890	ALD79627	II	ALD79626	III	Yes
Staphylococcus aureus	CP012593	ALC93031	II	ALC93030	III	Yes
Staphylococcus aureus	CP013137	ALO32817	II	ALO32816	III	Yes
Staphylococcus aureus	CP014064	AMG42487	II	AMG42486	III	Yes
Staphylococcus aureus RF122	AJ938182	CAI79720	II	CAI79719	III	Yes
Staphylococcus aureus subsp. aureus	CP012756	ALH98175	II	ALH98174	III	Yes
Staphylococcus aureus subsp. aureus ED133	CP001996	ADI96582	II	ADI96581	III	Yes
Starkeya novella DSM 506	CP002026	ADH88309	II	ADH88308	II	Yes
Stigmatella aurantiaca DW4/3-1	CP002271	ADO75254	II	ADO75256	I	Yes
Truepera radiovictrix DSM 17093	CP002049	ADI14366	II	ADI14365	III	Yes
Zunongwangia profunda SM-A87	CP001650	ADF52138	II	ADF52140	III	Yes
Acidithiobacillus ferrooxidans ATCC 23270	CP001219	ACK80058	VI	ACK79351	I	No
Acinetobacter baumannii AB307-0294	CP001172	ACJ59308	II	ACJ57939	I	No
Bacillus anthracis	CP007618	AIK30821	II	AIK33886	III	No
Bacillus anthracis	CP009325	AJG66736	II	AJG65100	III	No
Bacillus anthracis	CP009328	AJG85244	II	AJG83917	III	No
Bacillus anthracis	CP009331	AJG69762	II	AJG69973	III	No
Bacillus anthracis	CP009341	AJG88595	II	AJG86174	III	No
Bacillus anthracis	CP009464	AJH27448	II	AJH28496	III	No
Bacillus anthracis	CP009476	AJH32337	II	AJH36893	III	No
Bacillus anthracis	CP009544	AJH52667	II	AJH50583	III	No
Bacillus anthracis	CP009697	AJH40507	II	AJH40972	III	No
Bacillus anthracis	CP009700	AJH59524	II	AJH57498	III	No
Bacillus anthracis	CP009902	AJH89568	II	AJH87313	III	No
Bacillus anthracis	CP009981	AJH96042	II	AJH94445	III	No
Bacillus anthracis	CP010322	AJI38370	II	AJI38843	III	No
Bacillus anthracis str. A0248	CP001598	ACQ46350	II	ACQ48342	III	No
Bacillus anthracis str. CDC 684	CP001215	ACP16297	II	ACP17081	III	No
Bacillus anthracis str. Sterne	CP009541	AJH45563	II	AJH47135	III	No
Bacillus anthracis str. Turkey32	CP009315	AJG46750	II	AJG49390	III	No
Bacillus anthracis str. V770-NP-1R	CP009598	AJH98567	II	AJH97473	III	No
Bacillus anthracis str. Vollum	CP007666	AIK63166	II	AIK62793	III	No

Bacillus cereus	CP009596	AJH64406	II	AJH64577	III	No
Bacillus cereus	CP009605	AJK37200	II	AJK35243	III	No
Bacillus cereus AH820	CP001283	ACK90827	II	ACK91054	III	No
Bacillus cereus ATCC 4342	CP009628	AJH75840	II	AJH75740	III	No
Bacillus cereus B4264	CP001176	ACK61046	II	ACK61058	III	No
Bacillus cereus E33L	CP009968	AJI29308	II	AJI28643	III	No
Bacillus cereus G9842	CP001186	ACK98325	II	ACK94744	III	No
Bacillus mycooides	CP009692	AJH17677	II	AJH20286	III	No
Bacillus simplex	CP011008	AMM95375	II	AMM91879	III	No
Bacillus thuringiensis	CP009335	AJG75521	II	AJG75045	III	No
Bacillus thuringiensis	CP009720	AJH84140	II	AJH81288	III	No
Bacillus thuringiensis	CP010088	AJI36625	II	AJI33691	III	No
Bacillus thuringiensis HD1002	CP009351	AJH07400	II	AJH07457	III	No
Bacillus thuringiensis serovar konkukian str. 97-27	AE017355	AAT61898	II	AAT61441	III	No
Burkholderia ambifaria AMMD	CP009798	AJY23421	II	AJY22559	II	No
Burkholderia cenocepacia	CP007781	AIO42796	II	AIO41555	II	No
Burkholderia cenocepacia	CP007783	AIO33726	II	AIO32130	II	No
Burkholderia cepacia	CP007787	AIO48113	II	AIO49866	II	No
Burkholderia cepacia JBK9	CP013730	ALX11825	II	ALX13332	II	No
Burkholderia dolosa AU0158	CP009795	AJY13457	II	AJY13238	II	No
Burkholderia gladioli	CP009323	AJX00557	II	AJW97857	II	No
Burkholderia glumae LMG 2196 = ATCC 33617	CP009435	AJY67854	II	AJY67425	II	No
Burkholderia multivorans	CP008730	AIO76740	II	AIO77422	II	No
Burkholderia multivorans ATCC BAA-247	CP009832	AJY18170	II	AJY20259	II	No
Burkholderia oklahomensis	CP008726	AIO67752	II	AIO66076	II	No
Burkholderia oklahomensis C6786	CP009555	AJX32489	II	AJX32671	II	No
Burkholderia pseudomallei	CP008758	AIO89913	II	AIO90354	II	No
Burkholderia pseudomallei	CP008780	AIP04659	II	AIP05092	II	No
Burkholderia pseudomallei	CP008781	AIO12516	II	AIO12843	II	No
Burkholderia pseudomallei	CP008834	AIP13381	II	AIP14225	II	No
Burkholderia pseudomallei	CP009128	AIP71509	II	AIP71688	II	No
Burkholderia pseudomallei	CP009157	AIV79007	II	AIV78062	II	No

Burkholderia pseudomallei	CP009209	AIP80805	II	AIP81466	II	No
Burkholderia pseudomallei	CP009545	AJX86741	II	AJX87496	II	No
Burkholderia pseudomallei	CP009585	AJX38860	II	AJX37140	II	No
Burkholderia pseudomallei 1026b	CP004379	AJX09475	II	AJX09349	II	No
Burkholderia pseudomallei 1106a	CP000572	ABN92011	II	ABN91551	II	No
Burkholderia pseudomallei 406e	CP009298	AJW91583	II	AJW92141	II	No
Burkholderia pseudomallei 576	CP008777	AIO97593	II	AIO97032	II	No
Burkholderia pseudomallei 668	CP000570	ABN85009	II	ABN82641	II	No
Burkholderia pseudomallei 7894	CP009535	AJX81139	II	AJX80500	II	No
Burkholderia pseudomallei A79A	CP009165	AIV96359	II	AIV97964	II	No
Burkholderia pseudomallei B03	CP009151	AIV90659	II	AIV90671	II	No
Burkholderia pseudomallei HBPUB10134a	CP008911	AIP53131	II	AIP50144	II	No
Burkholderia pseudomallei HBPUB10303a	CP008894	AIP58765	II	AIP58236	II	No
Burkholderia pseudomallei K42	CP009162	AIV63394	II	AIV62748	II	No
Burkholderia pseudomallei K96243	CP009538	AJX26913	II	AJX28864	II	No
Burkholderia pseudomallei MSHR146	CP004042	AHG66898	II	AHG68247	II	No
Burkholderia pseudomallei MSHR2543	CP009478	AJX75902	II	AJX78340	II	No
Burkholderia pseudomallei MSHR305	CP006470	AGR71081	II	AGR70496	II	No
Burkholderia pseudomallei MSHR491	CP009485	AJX21602	II	AJX24002	II	No
Burkholderia pseudomallei MSHR511	CP004023	AHG34364	II	AHG35224	II	No
Burkholderia pseudomallei MSHR520	CP004368	AHK67164	II	AHK66020	II	No
Burkholderia pseudomallei MSHR5848	CP008909	AIP40728	II	AIP41317	II	No
Burkholderia pseudomallei MSHR5855	CP008784	AIP21382	II	AIP20926	II	No
Burkholderia pseudomallei MSHR5858	CP008892	AIP49115	II	AIP47683	II	No
Burkholderia pseudomallei MSHR62	CP009235	AIV73016	II	AIV71841	II	No
Burkholderia pseudomallei MSHR840	CP009474	AJX70274	II	AJX70638	II	No
Burkholderia pseudomallei NAU20B-16	CP004003	AHE32556	II	AHE31986	II	No
Burkholderia pseudomallei NAU35A-3	CP004377	AIS88806	II	AIS87165	II	No
Burkholderia pseudomallei NCTC 13178	CP004001	AHE28000	II	AHE28085	II	No
Burkholderia pseudomallei NCTC 13179	CP003976	AGZ28927	II	AGZ27877	II	No
Burkholderia pseudomallei Pasteur 52237	CP009899	AJX61835	II	AJX59178	II	No
Burkholderia pseudomallei PB08298010	CP009551	AJX97326	II	AJX96801	II	No

<i>Burkholderia pseudomallei</i> TSV 48	CP009161	AIV46573	II	AIV47854	II	No
<i>Burkholderia</i> sp. 2002721687	CP009549	AJY42299	II	AJY41891	II	No
<i>Burkholderia thailandensis</i>	CP008914	AIP64538	II	AIP63064	II	No
<i>Burkholderia thailandensis</i> 2002721643	CP009601	AJY00189	II	AJX97484	II	No
<i>Burkholderia thailandensis</i> 2002721723	CP004097	AHI72393	II	AHI73953	II	No
<i>Burkholderia thailandensis</i> 34	CP010017	AJY28435	II	AJY27405	II	No
<i>Burkholderia thailandensis</i> E254	CP004381	AIT20610	II	AIT22380	II	No
<i>Burkholderia thailandensis</i> E264	CP000086	ABC37566	II	ABC39027	II	No
<i>Burkholderia thailandensis</i> E444	CP004117	AHI77389	II	AHI79333	II	No
<i>Burkholderia thailandensis</i> H0587	CP004089	AHI64790	II	AHI64880	II	No
<i>Burkholderia thailandensis</i> MSMB121	CP004095	AGK48637	II	AGK47454	II	No
<i>Burkholderia thailandensis</i> MSMB59	CP004385	AIS93957	II	AIS95277	II	No
<i>Burkholderia thailandensis</i> USAMRU Malaysia #20	CP004383	AIC87887	II	AIC86240	II	No
<i>Burkholderia ubonensis</i> MSMB22	CP009488	AJX17889	II	AJX15564	II	No
<i>Burkholderia vietnamiensis</i> LMG 10929	CP009631	AJY07055	II	AJY05940	II	No
<i>Croceicoccus naphthovorans</i>	CP011770	AKM10652	II	AKM11820	II	No
<i>Lysinibacillus varians</i>	CP006837	AHN21601	II	AHN21602	III	No
<i>Paenarthrobacter aurescens</i> TC1	CP000476	ABM10729	II	ABM10812	III	No
<i>Paraburkholderia fungorum</i>	CP010025	AJZ56765	II	AJZ56705	II	No
<i>Paraburkholderia xenovorans</i> LB400	CP008762	AIP35447	II	AIP36658	II	No
<i>Pasteurella multocida</i>	CP008918	AIN48829	II	AIN48805	II	No
<i>Pseudomonas monteilii</i>	CP013997	AMA47886	II	AMA46367	II	No
<i>Pseudomonas savastanoi</i> pv. <i>phaseolicola</i> 1448A	CP000058	AAZ35149	II	AAZ33023	II	No
<i>Staphylococcus aureus</i>	CP007539	AHW66427	II	AHW65826	III	No
<i>Staphylococcus aureus</i>	CP007657	ALK40591	II	ALK40590	III	No
<i>Staphylococcus aureus</i>	CP011147	AKA98231	II	AKA98230	III	No
<i>Staphylococcus aureus</i>	LN831049	CKH05136	II	CKH05181	III	No
<i>Staphylococcus aureus</i> 04-02981	CP001844	ADC36300	II	ADC36299	III	No
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ECT-R 2	FR714927	CBX33449	II	CBX33448	III	No
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ED98	CP001781	ACY09985	II	ACY09984	III	No
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> MSSA476	BX571857	CAG41826	II	CAG41825	III	No
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> Mu3	AP009324	BAF76970	II	BAF76969	III	No

Staphylococcus aureus subsp. aureus Mu50	BA000017	BAB56250	II	BAB56249	III	No
Staphylococcus aureus subsp. aureus MW2	BA000033	BAB93923	II	BAB93922	III	No
Staphylococcus aureus subsp. aureus N315	BA000018	BAB41303	II	BAB41302	III	No
Staphylococcus aureus subsp. aureus ST228	HE579059	CCJ10028	II	CCJ10027	III	No
Staphylococcus aureus subsp. aureus ST228	HE579065	CCJ25747	II	CCJ25746	III	No
Staphylococcus aureus subsp. aureus ST228	HE579067	CCJ17886	II	CCJ17885	III	No
Staphylococcus aureus subsp. aureus ST228	HE579069	CCJ19849	II	CCJ19848	III	No
Staphylococcus aureus subsp. aureus ST228	HE579071	CCJ21813	II	CCJ21812	III	No
Staphylococcus aureus subsp. aureus ST228	HE579073	CCJ23781	II	CCJ23780	III	No
Staphylococcus aureus subsp. aureus ST772-MRSA-V	CP010526	AJE63516	II	AJE63515	III	No
Staphylococcus aureus subsp. aureus str. Newman	AP009351	BAF66301	II	BAF66300	III	No

Note:

The green color represents the strains that carry two physically linked pdo-sqr.

The yellow color represents the strains that have one pdo gene and two sqr genes that are physically linked.

The blue color represents the stains that encode one copy of physically linked pdo-sqr.

* 'Yes' means this pair of PDO and SQR was found in the first batch of searching; 'No' means it was not.