

CP053081  
CPT01655.1:481184-488955  
Dickeyella thymicola strain Echi1591

AF188507.1  
CP083415.1:412761-415373  
Pectobacterium parmentieri

ALH15241.1  
CP018817.1:2284473-2310518  
Mycobacterium

AP040445.1  
CP051372.1:187942-882739  
Cellulophaga lytica

CNG07481.1  
CP21010088.1:43-971  
Yersinia similis

EA308081.1  
AAAF5301800062.1:1-1914  
Salmonella enterica subsp. enterica serovar Ansterdam

K0976725.1:722971-728418  
Bacillus cereus V0136

EC527191.1  
KE159529.1:13391-23555  
Lachnospiraceae bacterium A4

EXS33434.1  
JFY001008006.1:156422-159211  
Actinobacterium sp. 826659

GCD01246.1  
BKZ01008001.1:342470-345949  
Paragaeococcus thermophilus

GFD83746.1  
BL11000230.1:284-5300  
Tenuibaculum sp. K0L118

GM57751.1  
B0210100819.1:783-2358  
Cannocytophaga canimorsus

GM57751.1  
B0210100819.1:783-2358  
Cannocytophaga canimorsus

GM57751.1  
B0210100819.1:783-2358  
Cannocytophaga canimorsus

KB280621.1  
MB02100834.1:1288-2806  
Kofleriaceae bacterium

KA120511.1  
APJ501008210.1:1-1918  
Clostridium tetanomorphum DSM 665

KIN45993.1  
JXMR1008833.1:104242-108363  
Bacillus subtilis

KXB45308.1  
K0033924.1:10726-14276  
Parabacteroides gonodoni MS-1 = DSM 23371

MB631007.1  
JAAT5101000056.1:62-529  
Listeria portynae

MB676425.1  
JACMG01000045.1:1-3902  
Vitreoscilla sp.

MBD513570.1  
JAVN0201000026.1:12069-15177  
Lachnospiraceae bacterium

MBD52626.1  
JAVN01000020.1:6108-12917  
Bacteroides sp.

MB054141.1  
JAU0501000020.1:15144-18265  
Lachnospiraceae bacterium

MBE506016.1  
JADKB10000014.1:87500-91503  
Hydrogenibacillus sp.

MBF100674.1  
JABZK010000009.1:137-3533  
Prevotellaceae bacterium

MBI303667.1  
JACOFF10000026.1:1-2010  
Planctomyces bacterium

MBJ798751.1  
JAEHC010000027.1:158136-62706  
Bacillus cereus

MBL901319.1  
JAEUL030000165.1:1-9460  
Mycobacterium

MBG053324.1  
JACAT01000062.1:14425-14462  
Fibrobacter sp.

MBG013284.1  
JAEPR01000026.1:22121-37828  
Bacteroidia bacterium

MC074706.1  
JACG501000082.1:59268-64490  
Bacteroidaceae bacterium

MC080451.1  
JAFRS010000023.1:245836-253635  
Bacteroides bacterium

MC0138052.1  
JAFTR010000018.1:183096-187898  
Alistipes sp.

MBR005858.1  
JAAZ70010000003.1:110836-117401  
Bacillus safensis

MBR533148.1  
JAFYS010000008.1:1-2368  
Alistipes sp.

MBT8443.1  
JAFY01000009.1:111-7518  
Alistipes sp.

MBW513411.1  
MC101000006.1:2236-9200  
Pseudomonas sp. MAG602Y

MCAC2628.1  
JAU101000006.1:149386-61389  
Bacteroidetes bacterium

MC101000006.1  
JACG501000082.1:59268-64490  
Acidobacteria bacterium

NF151827.1  
SM5001000003.1:72710-79369  
Clostridium botulinum

NC129744.1  
JABFR010000485.1:1-1730  
Polyangaceae bacterium

OC507802.1  
MUYC01000003.1:19213-22648  
Moraxella cuniculi

OP288974.1  
MAA101008469.1:11332-3730  
Fimbricutes bacterium Aburh.BJN419

OU11769.1  
MGG61008218.1:246489-255123  
Alcaligena sp. CACJAM 792

PAV0824.1  
MSG01000084.1:1-1774  
Pseudoterramonas sp. HM-5403

PI24007.1  
MVG01008024.1:8-3438  
Snodgrassella alvi

PSA0241.1  
PYWA01008002.1:537888-548712  
Bacillus atrophaeus

PIK00814.1  
GG610100802.1:435523-437617  
Flavobacterium araucanum

PZ075705.1  
QF101008853.1:10442-17114  
Mesophilic amorphous

QCMI3004.1  
CP039911.1:1406734-1417680  
Agrobacterium tumefaciens

QDT76784.1  
CP036341.1:252349-267300  
Gieseria maris

QCQ3099.1  
CP06552.1:1449990-4599920  
Pectobacterium carotovorum

RCM42500.1  
OST01008025.1:1-7070  
Phocaeicola vulgatus

RHC60297.1  
QSF10100810.1:1-2072  
Bacteroides uniformis

RUC02877.1  
RYZ201008001.1:365443-368728  
Peribacillus cavernae

RZ192796.1  
SECC01008187.1:1-2690  
Hymenobacter sp.

RZ194544.1  
SECC01008127.1:1779-3287  
Hymenobacter sp.

TGV01061.1  
SR501008028.1:62038-65434  
Flavivirga rishanensis

TMQ12238.1  
VBL001008376.1:13966-20548  
Betaproteobacteria bacterium

WP\_1972450.1  
NZ\_LJ4900100000818.1:133565-39277  
Bacillus tropicalis

WP\_00208279.1  
NZ\_CP008072.1:2821511-8025267  
Bacillus cereus 95/8021

WP\_00207684.1  
NZ\_AJ0080005.1:44013-52832  
Treponema saccharophilum DSM 2985

WP\_00208280.1  
NZ\_AJ0202000014.1:1123909-113862  
Gemella haemolyans ATCC 18379

WP\_20002705.1  
NZ\_LJFK01000016.1:8491-13264  
Clostridium sporogenes

WP\_03961310.1  
NZ\_CP045720.1:2456924-2466251  
Pantoea euclalypti

WP\_23518284.1  
NZ\_JBN01000026.1:186936-112407  
Cronobacter sakazakii

WP\_23562883.1  
NZ\_BNS01000088.1:1-1526  
Pseudomonas amygdali pv. norsprunorum

WP\_1482357.1  
NZ\_B1321.1:1354868-359206  
Flavobacterium sp. W044

WP\_18022867.1  
NZ\_CAF0010000810.1:208082-216139  
Burkholderia gladioli

WP\_01572047.1  
NZ\_B13418.1:1888665-1894541  
Fibrobacter succinogenes subsp. succinogenes S85

WP\_30703002.1  
NZ\_SLX01000017.1:18474-29691  
Flavonifractor plautii DSM 6740

WP\_185004348.1  
NZ\_XV01000027.1:5254-7982  
Bacillus sp. IMC437C12Cv1529

WP\_02764300.1  
NZ\_AUJ001000097.1:12083-6482  
[Clostridium] clostridioforme AG02157

WP\_21124736.1  
NZ\_AUL01000056.1:33326-36987  
Oceanospirillum birjeirickii DSM 7166

WP\_05137268.1  
NZ\_K838747.1:110212-114038  
Ectococcus panamicterrae DSM 19096

WP\_20080560.1  
NZ\_CP020953.1:643968-649764  
Clostridium drakei

WP\_1879851.1  
NZ\_JL380100001.1:1-1348  
Porphyromonas crevioricanis

WP\_152012547.1  
NZ\_NA110100001.1:427495-432518  
Leisingera sp. ANG-M7

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1  
NZ\_JAD001000080.1:1028963-1026357  
Tenuibaculum mesophilum

WP\_1873785.1  
NZ\_CBR01000020.1:1-13686  
Pseudomonas fluorescens

WP\_08402962.1  
NZ\_BZC01000020.1:177978-83347  
Pseudomonas fluorescens B33044

WP\_14490056.1  
NZ\_WA0H01000030.1:1-3121  
Snodgrassella alvi

WP\_18991413.1  
NZ\_ORYF01000126.1:14252-17807  
Xanthomonas fragariae

WP\_08027026.1  
NZ\_BRP01000003.1:1401159-407391  
Dokdonia pacifica

WP\_13021547.1  
NZ\_PFS501000003.1:124439-103632  
Lysobacter sp. cf310

WP\_13025722.1  
NZ\_CP0M01000009.1:1-2061  
Paracidovorax konjaci

WP\_14215686.1  
NZ\_MPT01000024.1:1415-15333  
Haella sp. CCB-MM4

WP\_20237448.1  
NZ\_CP089288.1:5957118-5961958  
Paenibacillus durus

WP\_14463220.1  
NZ\_AP014637.1:2326173-2338211  
Pseudomonas sp. STFLB09

WP\_05068797.1  
NZ\_GAL01000011.1:147400-155485  
Galliaxonas pentamotivivans

WP\_05068140.1  
NZ\_IP0H01000011.1:2862458-2978444  
Chryseobacterium sp. Lea794

WP\_20032600.1  
NZ\_WF0B01000091.1:1-2329  
Pseudomonas viridiflava

WP\_06038621.1  
NZ\_CP018992.1:13873794-3077261  
Flavobacterium sp. cf310

WP\_00514674.1  
NZ\_CP011158.1:1594777-1972899  
Moraxella ovis

WP\_18027160.1