

SUPPLEMENTARY MATERIAL

DNA-binding properties of MafR, a global regulator of *Enterococcus faecalis*

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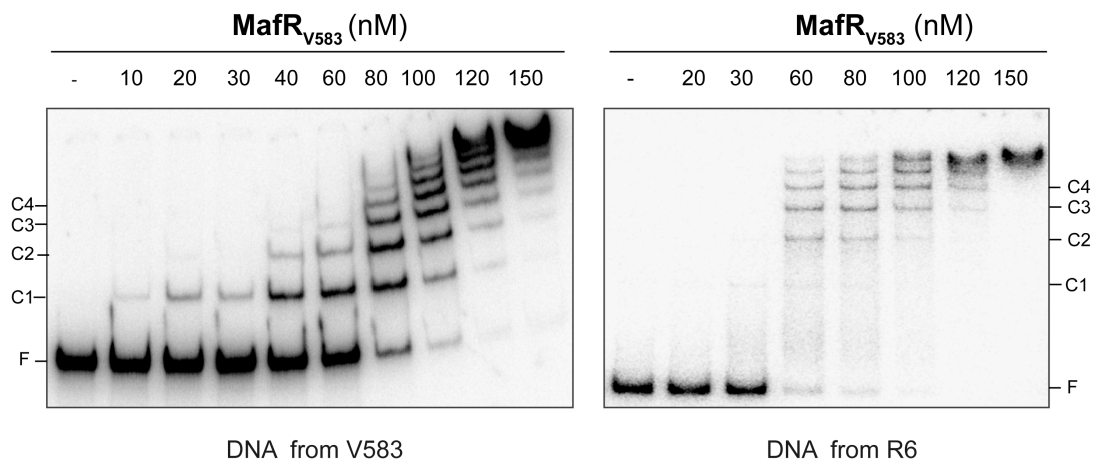


Figure S1. MafR_{V583} binds to DNA with little or no sequence specificity. EMSA using either a 321-bp DNA fragment from the *E. faecalis* V583 chromosome or a 322-bp DNA fragment from the *S. pneumoniae* R6 chromosome. ³²P-labeled DNA (1 nM) was incubated with the indicated concentration of MafR_{V583} in the presence of competitor calf thymus DNA (1 µg/ml). Bands corresponding to free DNA (F) and some MafR_{V583}-DNA complexes (C1, C2, C3, and C4) are indicated.

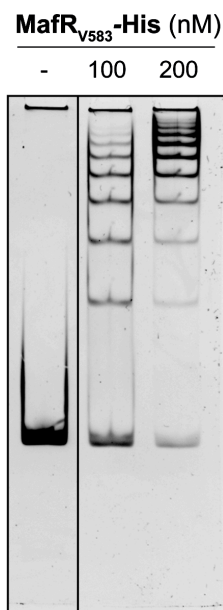


Figure S2. A His-tag at the C-terminal end of MafR_{V583} does not affect the formation of multiple protein-DNA complexes. EMSA using a 260-bp DNA fragment (10 nM) from the *E. faecalis* V583 chromosome. This fragment contains the *Pma* promoter. All the lanes came from the same gel. DNA was stained with GelRed (Biotium) and visualized using a Gel Doc system (Bio-Rad).

Table S1. *E. faecalis* genomes that encode a protein identical to MafR_{V583}.
Data from the National Center for Biotechnology Information (22/12/2017)

CDS Region in Nucleotide	Strain	Assembly
NZ_ASWX01000026.111596-13044 (-)	10244	GCF_000438765.1
NZ_JVZS01000108.19226-10674 (+)	1187_EFLS	GCF_001054015.1
NZ_JTKT01000044.157194-58642 (-)	12	GCF_000788155.1
NZ_JVXY01000083.15541-6989 (-)	1228_EFLS	GCF_001053105.1
NZ_JVXC01000028.138901-40349 (+)	1248_EFLS	GCF_001053145.1
NZ_NSJS01000009.160862-62310 (+)	13.1	GCF_002289025.1
NZ_JVUK01000047.138892-40340 (+)	1308_EFLS	GCF_001053335.1
NZ_JVTP01000177.114042-15490 (+)	1325_EFLS	GCF_001054355.1
NZ_JVTX01000054.111834-13282 (-)	132_EFLS	GCF_001053375.1
NZ_JVTG01000041.111653-13101 (-)	1333_EFLS	GCF_001053475.1
NZ_JVTK01000090.140667-42115 (+)	133_EFLS	GCF_001053455.1
NZ_JTKW01000011.111517-12965 (+)	19	GCF_000788165.1
NZ_JVPS01000031.15438-6886 (-)	213_EFLS	GCF_001055935.1
NZ_JVOC01000096.111622-13070 (-)	257_EFLS	GCF_001056115.1
NZ_JVOB01000041.18683-10131 (+)	258.rep1_EFLS	GCF_001056125.1
NZ_JVOA01000129.15438-6886 (-)	258.rep2_EFLS	GCF_001054785.1
NZ_JVJB01000075.145803-47251 (+)	388_EFLS	GCF_001056555.1
NZ_JVIY01000071.19222-10670 (+)	391_EFLS	GCF_001055025.1
NZ_JVIK01000098.111870-13318 (-)	406_EFLS	GCF_001055055.1
NZ_NSJR01000012.19305-10753 (+)	44.1	GCF_002288985.1
NZ_JVBG01000155.111770-13218 (-)	581_EFLS	GCF_001055395.1
NZ_JVAM01000095.111629-13077 (-)	601_EFLS	GCF_001057515.1
NZ_JUZT01000082.18683-10131 (+)	621_EFLS	GCF_001057625.1
NZ_JUWK01000157.136322-37770 (+)	703_EFLS	GCF_001058015.1
NZ_KB932369.1173931-175379 (+)	7330082-2	GCF_000390745.1
NZ_JUUM01000067.138900-40348 (+)	751_EFLS	GCF_001058285.1

CDS Region in Nucleotide	Strain	Assembly
NZ_KK640503.174949-76397 (-)	918	GCF_000690925.1
NZ_JUMK01000080.111623-13071 (-)	948_EFLS	GCF_001059635.1
NZ_KB944973.1206852-208300 (+)	A-3-1	GCF_000393495.1
NZ_KB944874.1156800-158248 (+)	ATCC 10100	GCF_000393395.1
NZ_KB947429.11691051-1692499 (+)	ATCC 27275	GCF_000395245.1
NZ_KB947435.11679303-1680751 (+)	ATCC 27959	GCF_000395265.1
NZ_JSES01000030.174792-76240 (-)	ATCC 51299	GCF_000772515.1
NZ_KB948285.162407-63855 (+)	B1005	GCF_000395985.1
NZ_KB948306.12395739-2397187 (+)	B1138	GCF_000396005.1
NZ_KB948323.162413-63861 (+)	B1249	GCF_000396025.1
NZ_KB932412.172356-73804 (+)	B1290	GCF_000390945.1
NZ_KB932415.12614098-2615546 (+)	B1327	GCF_000390965.1
NZ_KB932419.1166162-167610 (+)	B1376	GCF_000390985.1
NZ_KB932422.1274971-276419 (-)	B1385	GCF_000391005.1
NZ_KB932428.1161711-163159 (+)	B1441	GCF_000391025.1
NZ_KB932431.12347403-2348851 (+)	B1505	GCF_000391045.1
NZ_KB932436.1162878-164326 (+)	B1532	GCF_000391065.1
NZ_KB932314.1203471-204919 (-)	B15725	GCF_000390505.1
NZ_KB932437.1800614-802062 (+)	B1586	GCF_000391085.1
NZ_KB932443.1163039-164487 (+)	B1618	GCF_000391105.1
NZ_KB932444.1165203-166651 (+)	B1623	GCF_000391125.1
NZ_KB932449.1161281-162729 (+)	B1678	GCF_000391145.1
NZ_KB932458.1164912-166360 (+)	B1696	GCF_000391165.1
NZ_KB932466.1166349-167797 (+)	B1719	GCF_000391185.1
NZ_KB932470.1163052-164500 (+)	B1734	GCF_000391205.1
NZ_KB945564.172356-73804 (+)	B1843	GCF_000391225.1
NZ_KB948376.172356-73804 (+)	B1851	GCF_000396045.1
NZ_KB932480.172356-73804 (+)	B1874	GCF_000391245.1
NZ_KB948413.172356-73804 (+)	B1933	GCF_000396085.1

CDS Region in Nucleotide	Strain	Assembly
NZ_KB948433.172356-73804 (+)	B2202	GCF_000396105.1
NZ_KB948456.162425-63873 (+)	B2211	GCF_000396125.1
NZ_KB932491.159512-60960 (+)	B2255	GCF_000391285.1
NZ_KB948493.172356-73804 (+)	B2277	GCF_000396145.1
NZ_KB945593.172356-73804 (+)	B2391	GCF_000391305.1
NZ_KB932507.172356-73804 (+)	B2488	GCF_000391325.1
NZ_KB932514.172356-73804 (+)	B2535	GCF_000391345.1
NZ_KB932519.172356-73804 (+)	B2557	GCF_000391365.1
NZ_KB932520.189368-90816 (+)	B2593	GCF_000391385.1
NZ_KB948517.11834358-1835806 (+)	B2670	GCF_000396165.1
NZ_KB948592.1284748-286196 (+)	B2685	GCF_000396185.1
NZ_KB948595.165812-67260 (+)	B2687	GCF_000396205.1
NZ_KB948636.172356-73804 (+)	B2802	GCF_000396225.1
NZ_KB948683.172356-73804 (+)	B2813	GCF_000396245.1
NZ_KB948725.165632-67080 (+)	B2864	GCF_000396265.1
NZ_KB948745.162413-63861 (+)	B2867	GCF_000396285.1
NZ_KB948774.1166161-167609 (+)	B2949	GCF_000396305.1
NZ_KB932527.11819761-1821209 (+)	B3031	GCF_000391405.1
NZ_KB932529.159512-60960 (+)	B3042	GCF_000391425.1
NZ_KB932534.159512-60960 (+)	B3053	GCF_000391445.1
NZ_KB948805.172356-73804 (+)	B3119	GCF_000396325.1
NZ_KB932546.162419-63867 (+)	B3126	GCF_000391465.1
NZ_KB948848.172356-73804 (+)	B3196	GCF_000396345.1
NZ_KB948881.1166489-167937 (+)	B3286	GCF_000396365.1
NZ_KB948900.1124817-126265 (+)	B3336	GCF_000396385.1
NZ_KB948925.1166224-167672 (+)	B4008	GCF_000396405.1
NZ_KB948964.172356-73804 (+)	B4018	GCF_000396425.1
NZ_KB948991.1166305-167753 (+)	B4148	GCF_000396445.1
NZ_KB949006.172356-73804 (+)	B4163	GCF_000396465.1

CDS Region in Nucleotide	Strain	Assembly
NZ_KB949061.172356-73804 (+)	B4259	GCF_000396485.1
NZ_KB949100.172356-73804 (+)	B4267	GCF_000396505.1
NZ_KB949122.162413-63861 (+)	B4270	GCF_000396525.1
NZ_KB949162.172356-73804 (+)	B4411	GCF_000396545.1
NZ_KB949233.162413-63861 (+)	B4568	GCF_000396565.1
NZ_KB949267.1166041-167489 (+)	B4638	GCF_000396585.1
NZ_KB949294.172356-73804 (+)	B4672	GCF_000396605.1
NZ_KB949324.12422921-2424369 (+)	B4674	GCF_000396625.1
NZ_KB949330.172356-73804 (+)	B4969	GCF_000396645.1
NZ_KB946644.165587-67035 (+)	B5035	GCF_000394355.1
NZ_KB949383.160768-62216 (+)	B5076	GCF_000396665.1
NZ_KB932551.161352-62800 (+)	B594	GCF_000391485.1
NZ_KB932327.1220811-222259 (-)	B69486	GCF_000390565.1
NZ_KB932554.174804-76252 (+)	B878	GCF_000391505.1
NZ_KB932556.172356-73804 (+)	B939	GCF_000391525.1
NZ_KI518231.1144185-145633 (+)	BM4654	GCF_000479065.1
NZ_KB947187.1187033-188481 (+)	CH570	GCF_000394855.1
NZ_KB945031.1173856-175304 (+)	D1	GCF_000393575.1
NC_018221.12655811-2657259 (+)	D32	GCF_000281195.1
NZ_KB947440.1154732-156180 (+)	DS16	GCF_000395285.1
NZ_KB947422.1208999-210447 (+)	E1	GCF_000395205.1
NZ_KB949611.1168792-170240 (+)	EnGen0253	GCF_000396865.1
NZ_KI912956.11668739-1670187 (+)	EnGen0402	GCF_000519465.1
NZ_KI912960.12465563-2467011 (+)	EnGen0403	GCF_000519485.1
NZ_KI912968.1172946-174394 (+)	EnGen0404	GCF_000519505.1
NZ_KI912974.11703587-1705035 (+)	EnGen0405	GCF_000519525.1
NZ_KI912990.11833094-1834542 (+)	EnGen0408	GCF_000519585.1
NZ_KI913001.11835480-1836928 (+)	EnGen0410	GCF_000519625.1
NZ_KI913012.1242353-243801 (+)	EnGen0412	GCF_000519665.1

CDS Region in Nucleotide	Strain	Assembly
NZ_KI913026.1172865-174313 (+)	EnGen0415	GCF_000519725.1
NZ_KI913052.1320649-322097 (-)	EnGen0418	GCF_000519785.1
NZ_KI913064.1154899-156347 (+)	EnGen0421	GCF_000519845.1
NZ_KI913084.1166753-168201 (+)	EnGen0423	GCF_000519885.1
NZ_KI913105.162425-63873 (+)	EnGen0427	GCF_000519965.1
NZ_FPEA01000010.174691-76139 (+)	G884	GCF_900117355.1
NZ_GG668823.189903-91351 (+)	HH22	GCF_000160155.1
NZ_LQAM01000012.1129090-130538 (+)	ICU1-2c	GCF_001594365.1
NZ_GG692699.1268611-270059 (-)	JH1	GCF_000157375.1
NZ_KB945004.1172699-174147 (+)	Merz192	GCF_000393535.1
NZ_KB945026.1210616-212064 (+)	Merz204	GCF_000393555.1
NZ_KB944981.1153777-155225 (+)	Merz89	GCF_000393515.1
NZ_KB947133.1161228-162676 (+)	MMH594	GCF_000394795.1
NZ_ADKN01000042.18681-10129 (+)	PC1.1	GCF_000178175.1
NZ_KB947448.1205362-206810 (+)	RC73	GCF_000395305.1
NZ_KB947485.12396009-2397457 (+)	RM3817	GCF_000395385.1
NZ_NBDW01000007.140653-42101 (+)	S14	GCF_002110435.1
NZ_KB947150.1141694-143142 (+)	SF100	GCF_000394815.1
NZ_KB946585.1153259-154707 (+)	SF1592	GCF_000394315.1
NZ_KB946554.1132962-134410 (+)	SF19	GCF_000394295.1
NZ_KB944934.1144174-145622 (+)	SF21520	GCF_000393455.1
NZ_KB946404.1119270-120718 (+)	SF26630	GCF_000394115.1
NZ_KB947168.11764920-1766368 (+)	SF370	GCF_000394835.1
NZ_AJET01000010.19258-10706 (+)	T15	GCF_000478325.1
NZ_KB944940.1106377-107825 (+)	TR161	GCF_000393475.1
NZ_GL454322.1203289-204737 (-)	TX0309A	GCF_000147555.1
NZ_GL454242.138868-40316 (+)	TX0309B	GCF_000147575.1
NZ_GL454421.111530-12978 (-)	TX4248	GCF_000147925.1
NZ_KB946185.1144552-146000 (+)	UAA1489	GCF_000393795.1

CDS Region in Nucleotide	Strain	Assembly
NZ_KB932569.1155111-156559 (+)	UAA823	GCF_000391585.1
NZ_KB949671.1170375-171823 (+)	UAA948	GCF_000396905.1
NC_004668.12889087-2890535 (+)	V583	GCF_000007785.1
NZ_KB946433.11865663-1867111 (+)	V587	GCF_000394175.1

Table S2. *E. faecalis* genomes that encode a protein identical to MafR_{OG1RF}.
Data from the National Center for Biotechnology Information (22/12/2017)

CDS Region in Nucleotide	Strain	Assembly
NZ_KB947327.11566104-1567552 (+)	12107	GCF_000395035.1
NZ_NJIN01000002.121220-22668 (-)	2070	GCF_002763385.1
NZ_JVPG01000051.138937-40385 (+)	226_EFLS	GCF_001054705.1
NZ_JVOF01000043.140668-42116 (+)	254_EFLS	GCF_001054775.1
NZ_JVOE01000045.16428-7876 (-)	255_ESPC	GCF_001056095.1
NZ_KB947499.1116890-118338 (+)	5952	GCF_000395405.1
NZ_JUVP01000106.148218-49666 (+)	724_EFLS	GCF_001058995.1
NZ_KB945040.1129056-130504 (+)	A-2-1	GCF_000393615.1
NZ_CP008816.11777509-1778957 (+)	ATCC 29212	GCF_000742975.1
NZ_NAQY01000006.179683-81131 (+)	ATCC BAA-2128	GCF_002088065.1
NZ_BDEN01000003.12589022-2590470 (+)	CBA7120	GCF_001662265.1
NZ_KB946671.11644822-1646270 (+)	Com 6	GCF_000394395.1
NZ_CP004081.12638410-2639858 (+)	DENG1	GCF_000550745.1
NZ_GG692884.1167619-169067 (+)	DS5	GCF_000157235.1
NZ_KI912939.12338250-2339698 (+)	EnGen0401	GCF_000519445.1
NZ_KI913017.1104421-105869 (+)	EnGen0413	GCF_000519685.1
NZ_KI913040.11625825-1627273 (+)	EnGen0417	GCF_000519765.1
NZ_KI913075.1352522-353970 (+)	EnGen0422	GCF_000519865.1
NZ_KI913088.1340358-341806 (-)	EnGen0425	GCF_000519925.1
NZ_FPDW01000010.149101-50549 (+)	G824	GCF_900117305.1
NZ_JPTY01000029.1172755-174203 (-)	LRS29212	GCF_000763355.1
NZ_AGVN01000001.112115-13563 (+)	M7	GCF_000320325.1
NZ_ANMP01000023.139379-40827 (+)	MA1	GCF_000524625.1
NZ_JPTZ01000032.1196742-198190 (-)	MA2	GCF_000763435.1
NC_017316.12421605-2423053 (+)	OG1RF	GCF_000172575.2
NZ_AFH01000049.112117-13565 (+)	OG1X	GCF_000320305.1

CDS Region in Nucleotide	Strain	Assembly
NZ_KB947339.1142262-143710 (+)	Pan7	GCF_000395075.1
NZ_KB944830.175734-77182 (+)	RMC65	GCF_000393315.1
NZ_KE351838.146657-48105 (+)	RP2S-4	GCF_000415245.2
NZ_NBDR01000045.111517-12965 (-)	S12	GCF_002110425.1
NZ_KB947335.1102214-103662 (+)	SF24396	GCF_000395055.1
NZ_KB946410.1107387-108835 (+)	SS-6	GCF_000394135.1
NZ_MCFV01000003.1913511-914959 (+)	ST4:12	GCF_001878785.1
NZ_GG670346.1269378-270826 (-)	T1	GCF_000157135.1
NZ_KB944675.1126077-127525 (+)	T10	GCF_000393055.1
NZ_KB947308.11579131-1580579 (+)	T13	GCF_000394995.1
NZ_KB944664.1107780-109228 (+)	T17	GCF_000392995.1
NZ_KB944587.1106202-107650 (+)	T20	GCF_000392855.1
NZ_KB947401.1111919-113367 (+)	T21	GCF_000395135.1
NZ_KB945036.1127774-129222 (+)	T4	GCF_000393595.1
NZ_KB944671.11673320-1674768 (+)	T9	GCF_000393035.1
NZ_GL454360.147700-49148 (+)	TX0027	GCF_000147535.1
NZ_GL454747.140555-42003 (+)	TX0031	GCF_000147275.1
NZ_GL455107.112529-13977 (-)	TX0102	GCF_000147215.1
NZ_GL456756.112525-13973 (-)	TX0312	GCF_000148305.1
NZ_GL456550.1143149-144597 (-)	TX0470	GCF_000148265.1
NZ_GL455563.148022-49470 (+)	TX2134	GCF_000148065.1
NZ_LYBN01000013.1170855-172303 (-)	UCD-PD3	GCF_001692955.1
NZ_JXMK01000014.154431-55879 (-)	ZHOU_T10_3	GCF_002105335.1
NZ_JXML01000011.154009-55457 (-)	ZHOU_T60_1	GCF_002105365.1

Table S3. Identical MafR groups

The name of the *E. faecalis* strain that represents the group is indicated. Data from the National Center for Biotechnology Information (22/12/2017)

CDS Region in Nucleotide	Strain	Assembly
Identical proteins to MafR from GA2		
NZ_AYKL01000045.138879-40327 (+)	GA2	GCF_000648035.1
NZ_KB944720.1137859-139307 (+)	RMC1	GCF_000393135.1
Identical proteins to MafR from KS19		
NZ_NGMZ01000003.1118141-119589 (+)	11D3_DIV0676	GCF_002140335.1
NZ_NGMY01000001.12612413-2613861 (+)	11D3_DIV0676_a	GCF_002140345.1
NZ_NGMP01000004.1247157-248605 (-)	2A11_DIV0231	GCF_002141205.1
NZ_JVAI01000024.113251-14699 (+)	606_EFLS	GCF_001055435.1
NZ_AYND01000016.129507-30955 (+)	KS19	GCF_000648075.1
NZ_JH804790.147968-49416 (+)	R508	GCF_000294325.2
Identical proteins to MafR from MTmid8		
NZ_GG692673.1293317-294765 (-)	E1Sol	GCF_000157395.1
NZ_AYKU01000025.133859-35307 (+)	MTmid8	GCF_000648135.1
Identical proteins to MafR from B653		
NZ_KB944834.1156908-158356 (+)	B653	GCF_000393335.1
Identical proteins to MafR from X98		
NZ_KE350816.131306-32754 (+)	02-MB-P-10	GCF_000415005.1
NZ_JUOO01000104.19820-11268 (+)	905_EFLS	GCF_001059345.1
NZ_KI913094.1331766-333214 (-)	EnGen0426	GCF_000519945.1
NZ_AYKK01000002.15551-6999 (-)	FL2	GCF_000648015.1
NZ_KB944767.194963-96411 (+)	Fly 2	GCF_000393215.1
NZ_KE350328.1209696-211144 (-)	KI-6-1-110608-1	GCF_000414985.1

CDS Region in Nucleotide	Strain	Assembly
NZ_KE352795.110504-11952 (-)	LA3B-2	GCF_000415465.2
NZ_AYKM01000032.139187-40635 (+)	MN16	GCF_000648115.1
NZ_KB944604.1170424-171872 (+)	T12	GCF_000392895.1
NZ_KB947301.1101283-102731 (+)	T16	GCF_000394975.1
NZ_KB944679.1141914-143362 (+)	T18	GCF_000393075.1
NZ_GL454526.136848-38296 (+)	TX0043	GCF_000147515.1
NZ_GL457161.147095-48543 (+)	TX1341	GCF_000148225.1
NZ_GL454567.114152-15600 (-)	TX1342	GCF_000147475.1
NZ_GG688424.1247954-249402 (-)	X98	GCF_000157515.1

Identical proteins to MafR from AZ19

NZ_JVBD01000053.112348-13796 (-)	584_EFLS	GCF_001057435.1
NZ_NGMW01000001.12169774-2171222 (+)	9A2_4861	GCF_002140925.1
NZ_NGMX01000001.1238509-239957 (-)	9F2_4866	GCF_002140985.1
NZ_KB944643.1107667-109115 (+)	ATCC 35038	GCF_000392955.1
NZ_AYLU01000053.112354-13802 (-)	AZ19	GCF_000647995.1
NZ_GL454530.112322-13770 (-)	TX1302	GCF_000147495.1
NZ_GL455430.112318-13766 (-)	TX0109	GCF_000148105.1
NZ_KB932564.1254045-255493 (-)	UAA769	GCF_000391565.1

Identical proteins to MafR from Com1

NZ_KE350943.141859-43307 (+)	02-MB-BW-10	GCF_000415045.1
NZ_NHNF01000004.1264537-265985 (-)	12_Tun	GCF_002220885.1
NZ_JTKU01000008.1263975-265423 (+)	17	GCF_000788185.1
NZ_KB946667.1110751-112199 (+)	Com 2	GCF_000394375.1
NZ_KB947407.1109632-111080 (+)	Com1	GCF_000395175.1
NZ_KI912926.12545756-2547204 (+)	EnGen0400	GCF_000519425.1
NZ_KI913021.1105439-106887 (+)	EnGen0414	GCF_000519705.1