

Supplementary data S3. BLAST search of the *KU_R21_2271* gene (NCBI accession: JX522460) yielded 98.04% to 99.84% identity to 36 sequences from *L. borgpetersenii* genomes.

RID: DW3W9HX8013

Job Title: JX522460: *Leptospira borgpetersenii* serovar...

Program: BLASTN

Query: *Leptospira borgpetersenii* serovar Sejroe leucine-rich repeat protein (LRR) gene, partial cds ID:

JX522460.1(nucleic acid) Length: 612

Database: nt Nucleotide collection (nt)

Sequences producing significant alignments:

Total Query	E	Per.	Acc.		Scientific	Common		Max
Description					Name	Name	Taxid	Score
Score cover Value Ident Len Accession								
Leptospira borgpetersenii serovar Sejroe leucine-rich repeat...					Leptospira b...	NA	338220	1131
1131 100% 0.0 100.00 612 JX522460.1								
Leptospira borgpetersenii strain R14-L chromosome 1					Leptospira b...	NA	174	1125
1125 100% 0.0 99.84 3581013 CP047516.1								
Leptospira borgpetersenii strain R6L chromosome 1					Leptospira b...	NA	174	1125
1125 100% 0.0 99.84 3580531 CP047520.1								
Leptospira borgpetersenii strain R14 chromosome 1					Leptospira b...	NA	174	1125
1125 100% 0.0 99.84 3601002 CP047504.1								
Leptospira borgpetersenii strain R6 chromosome 1					Leptospira b...	NA	174	1125
1125 100% 0.0 99.84 3513910 CP047372.1								
Leptospira borgpetersenii strain Mo4 chromosome 1					Leptospira b...	NA	174	1125
1125 100% 0.0 99.84 3581767 CP047334.1								
Leptospira borgpetersenii strain R28 chromosome 1					Leptospira b...	NA	174	1125
1125 100% 0.0 99.84 3580481 CP047332.1								
Leptospira borgpetersenii strain R23 chromosome 1					Leptospira b...	NA	174	1125
1125 100% 0.0 99.84 3579904 CP047370.1								
Leptospira borgpetersenii strain R29 chromosome 1					Leptospira b...	NA	174	1125
1125 100% 0.0 99.84 3580756 CP047330.1								
Leptospira borgpetersenii str. 4E chromosome 1					Leptospira b...	NA	1141102	1125
1125 100% 0.0 99.84 3550837 CP015814.2								
Leptospira borgpetersenii serovar Ballum strain 56604 chromoso...					Leptospira b...	NA	280505	1125
1125 100% 0.0 99.84 3550837 CP012029.1								
Leptospira borgpetersenii serovar Mini leucine-rich repeat...					Leptospira b...	NA	280507	1125
1125 100% 0.0 99.84 612 JX522459.1								
Leptospira borgpetersenii serovar Ballum leucine-rich repeat...					Leptospira b...	NA	280505	1125
1125 100% 0.0 99.84 612 JX522458.1								
Leptospira borgpetersenii strain 34-PK chromosome 1, complete...					Leptospira b...	NA	174	1120
1120 100% 0.0 99.67 3603305 CP097464.1								
Leptospira borgpetersenii serovar Ceylonica strain Piyasena...					Leptospira b...	NA	508536	1114
1114 100% 0.0 99.51 3670231 CP026671.1								

Leptospira borgpetersenii strain FMAS_AP2 chromosome 1, comple...	Leptospira b...	NA	174	1114
1114 100% 0.0 99.51 3595436 CP072630.1				
Leptospira borgpetersenii strain FMAS_AP3 chromosome 1, comple...	Leptospira b...	NA	174	1114
1114 100% 0.0 99.51 3595898 CP072628.1				
Leptospira borgpetersenii strain FMAS_AP4 chromosome 1, comple...	Leptospira b...	NA	174	1114
1114 100% 0.0 99.51 3595848 CP072626.1				
Leptospira borgpetersenii strain FMAS_PN1 chromosome 1, comple...	Leptospira b...	NA	174	1114
1114 100% 0.0 99.51 3596207 CP072624.1				
Leptospira borgpetersenii strain FMAS_PN4 chromosome 1, comple...	Leptospira b...	NA	174	1114
1114 100% 0.0 99.51 3595796 CP072622.1				
Leptospira borgpetersenii strain FMAS_AP8 chromosome 1, comple...	Leptospira b...	NA	174	1114
1114 100% 0.0 99.51 3595870 CP072620.1				
Leptospira borgpetersenii strain FMAS_AP9 chromosome 1, comple...	Leptospira b...	NA	174	1114
1114 100% 0.0 99.51 3595582 CP072618.1				
Leptospira borgpetersenii serovar Javanica leucine-rich repeat...	Leptospira b...	NA	280504	1114
1114 100% 0.0 99.51 612 JX522457.1				
Leptospira borgpetersenii serovar Hardjo strain NVSL S 818...	Leptospira b...	NA	328971	1070
1070 100% 0.0 98.20 3584464 CP015052.1				
Leptospira borgpetersenii serovar Hardjo-bovis JB197 chromosom...	Leptospira b...	NA	355277	1070
1070 100% 0.0 98.20 3576473 CP000350.1				
Leptospira borgpetersenii serovar Hardjo-bovis strain L49...	Leptospira b...	NA	338217	1064
1064 100% 0.0 98.04 3620710 CP033440.1				
Leptospira borgpetersenii serovar Hardjo-bovis strain 203...	Leptospira b...	NA	338217	1064
1064 100% 0.0 98.04 3589981 CP021412.1				
Leptospira borgpetersenii serovar Hardjo strain NVSL S 1343...	Leptospira b...	NA	328971	1064
1064 100% 0.0 98.04 3613654 CP015050.1				
Leptospira borgpetersenii serovar Hardjo strain BK-30 chromoso...	Leptospira b...	NA	328971	1064
1064 100% 0.0 98.04 3629289 CP015048.1				
Leptospira borgpetersenii serovar Hardjo strain BK-9 chromosome 1	Leptospira b...	NA	328971	1064
1064 100% 0.0 98.04 3631634 CP015046.1				
Leptospira borgpetersenii serovar Hardjo strain BK-6 chromosome 1	Leptospira b...	NA	328971	1064
1064 100% 0.0 98.04 3649879 CP015044.1				
Leptospira borgpetersenii strain KR39 chromosome 1, complete...	Leptospira b...	NA	174	1064
1064 100% 0.0 98.04 3603773 CP096127.1				
Leptospira borgpetersenii serovar Hardjo strain TC129 chromoso...	Leptospira b...	NA	328971	1064
1064 100% 0.0 98.04 3585597 CP084038.1				
Leptospira borgpetersenii strain TC147 chromosome I, complete...	Leptospira b...	NA	174	1064
1064 100% 0.0 98.04 3585599 CP084040.1				
Leptospira borgpetersenii strain TC273 chromosome I, complete...	Leptospira b...	NA	174	1064
1064 100% 0.0 98.04 3585577 CP084042.1				
Leptospira borgpetersenii strain TC112 chromosome I, complete...	Leptospira b...	NA	174	1064
1064 100% 0.0 98.04 3585599 CP084036.1				
Leptospira borgpetersenii serovar Hardjo-bovis L550 chromosome...	Leptospira b...	NA	355276	1064
1064 100% 0.0 98.04 3614446 CP000348.1				

Alignments:

>Leptospira borgpetersenii serovar Sejroe leucine-rich repeat protein (LRR) gene, partial cds

Sequence ID: JX522460.1 Length: 612

Range 1: 1 to 612

Score:1131 bits(612), Expect:0.0,

Identities:612/612(100%), Gaps:0/612(0%), Strand: Plus/Plus

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Query 1 GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA 60
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Sbjct 1 GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA 60

Query 61 GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC 120
      |||
Sbjct 61 GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC 120

Query 121 ACGGTTCCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC 180
      |||
Sbjct 121 ACGGTTCCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC 180

Query 181 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT 240
      |||
Sbjct 181 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT 240

Query 241 TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG 300
      |||
Sbjct 241 TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG 300

Query 301 TTAGTGGCGGAAATAACGATTTTACGATTCTACCTCCGAACCTTTGTTTCTTCCGTTG 360
      |||
Sbjct 301 TTAGTGGCGGAAATAACGATTTTACGATTCTACCTCCGAACCTTTGTTTCTTCCGTTG 360

Query 361 ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT 420
      |||
Sbjct 361 ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT 420

Query 421 CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG 480
      |||
Sbjct 421 CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG 480

Query 481 CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa 540
      |||
Sbjct 481 CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA 540

Query 541 aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCAAATACCAAA 600
      |||
Sbjct 541 AAAAATTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCAAATACCAAA 600

Query 601 ATCGACTACTGA 612
      |||
Sbjct 601 ATCGACTACTGA 612
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>Leptospira borgpetersenii strain R14-L chromosome 1

Sequence ID: CP047516.1 Length: 3581013

Range 1: 2585893 to 2586504

Score:1125 bits(609), Expect:0.0,

Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2585893	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2585952
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2585953	GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC	2586012
Query	121	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2586013	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2586072
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	2586073	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	2586132
Query	241	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAATAAATCTGAAAGTG	300
Sbjct	2586133	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAATAAATCTGAAAGTG	2586192
Query	301	TTACTGGCGGGAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2586193	TTACTGGCGGGAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2586252
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	420
Sbjct	2586253	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	2586312
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2586313	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2586372
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	2586373	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTAAA	2586432
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCAAATACCAAA	600
Sbjct	2586433	AAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCAAACACCAAA	2586492
Query	601	ATCGACTACTGA 612	
Sbjct	2586493	ATCGACTACTGA 2586504	

>Leptospira borgpetersenii strain R6L chromosome 1
Sequence ID: CP047520.1 Length: 3580531
Range 1: 2527014 to 2527625

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2527014	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2527073
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2527074	GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC	2527133

Query	121	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2527134	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2527193
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Sbjct	2527194	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	2527253
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	2527254	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	2527313
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTCCGTTG	360
Sbjct	2527314	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTCCGTTG	2527373
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	2527374	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	2527433
Query	421	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2527434	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2527493
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa	540
Sbjct	2527494	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTAAA	2527553
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	2527554	AAAACCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	2527613
Query	601	ATCGACTACTGA 612	
Sbjct	2527614	ATCGACTACTGA 2527625	

>Leptospira borgpetersenii strain R14 chromosome 1
Sequence ID: CP047504.1 Length: 3601002
Range 1: 2545970 to 2546581

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTTCCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2545970	GGCTTCGTTTGTTCCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2546029
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGGAAATGCAGAAGTTGTCC	120
Sbjct	2546030	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGGAAATGCAGAAGTTGTCC	2546089
Query	121	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2546090	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2546149
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Sbjct	2546150	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	2546209
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300

Sbjct	2546210	 TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAATCTGAAAGTG	2546269
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2546270	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2546329
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	2546330	 ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	2546389
Query	421	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2546390	 CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2546449
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	2546450	 CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTAAA	2546509
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	2546510	 AAAACCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	2546569
Query	601	ATCGACTACTGA 612 	
Sbjct	2546570	ATCGACTACTGA 2546581	

>Leptospira borgpetersenii strain R6 chromosome 1
Sequence ID: CP047372.1 Length: 3513910
Range 1: 2460661 to 2461272

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTGTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGA	60
Sbjct	2460661	 GGCTTCGTTTGTGTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGA	2460720
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGGAATGCAGAAGTTGTCC	120
Sbjct	2460721	 GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGGAATGCAGAAGTTGTCC	2460780
Query	121	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2460781	 ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2460840
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	2460841	 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	2460900
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAATCTGAAAGTG	300
Sbjct	2460901	 TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAATCTGAAAGTG	2460960
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2460961	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2461020
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420

Sbjct	2461021	ATCAAAATTCTATACGTAGATCGGAATAAATTA	ACTCTAACGGAAACGGATGTGGAAATT	2461080
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG		480
Sbjct	2461081	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG		2461140
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa		540
Sbjct	2461141	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA		2461200
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA		600
Sbjct	2461201	AAAACCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAA		2461260
Query	601	ATCGACTACTGA	612	
Sbjct	2461261	ATCGACTACTGA	2461272	

>Leptospira borgpetersenii strain Mo4 chromosome 1
Sequence ID: CP047334.1 Length: 3581767
Range 1: 2585809 to 2586420

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2585809	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2585868
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGGAAATGCAGAAGTTGTCC	120
Sbjct	2585869	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGGAAATGCAGAAGTTGTCC	2585928
Query	121	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2585929	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2585988
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	2585989	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	2586048
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	2586049	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	2586108
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2586109	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2586168
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTA	420
Sbjct	2586169	ATCAAAATTCTATACGTAGATCGGAATAAATTA	2586228
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2586229	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2586288
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa	540
Sbjct	2586289	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA	2586348

Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	2586349	AAAACCTTCATTAAAGGGAGAGGATGCAGATAAAATTGCAGGCGATTCTTCCAAACACCAAA	2586408
Query	601	ATCGACTACTGA	612
Sbjct	2586409	ATCGACTACTGA	2586420

>Leptospira borgpetersenii strain R28 chromosome 1
Sequence ID: CP047332.1 Length: 3580481
Range 1: 2527184 to 2527795

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2527184	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2527243
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2527244	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	2527303
Query	121	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2527304	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2527363
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	2527364	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	2527423
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	2527424	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	2527483
Query	301	TTACTGGCGGGAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2527484	TTACTGGCGGGAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2527543
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT	420
Sbjct	2527544	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT	2527603
Query	421	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2527604	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2527663
Query	481	CTCCCTTTTAATTACGAAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	2527664	CTCCCTTTTAATTACGAAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTAAA	2527723
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	2527724	AAAACCTTCATTAAAGGGAGAGGATGCAGATAAAATTGCAGGCGATTCTTCCAAACACCAAA	2527783
Query	601	ATCGACTACTGA	612
Sbjct	2527784	ATCGACTACTGA	2527795

>Leptospira borgpetersenii strain R23 chromosome 1
Sequence ID: CP047370.1 Length: 3579904
Range 1: 2527240 to 2527851

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2527240	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2527299
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2527300	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	2527359
Query	121	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2527360	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2527419
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	2527420	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	2527479
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	2527480	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	2527539
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2527540	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2527599
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	2527600	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	2527659
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2527660	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2527719
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa	540
Sbjct	2527720	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTAAA	2527779
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	2527780	AAAACCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	2527839
Query	601	ATCGACTACTGA 612	
Sbjct	2527840	ATCGACTACTGA 2527851	

>Leptospira borgpetersenii strain R29 chromosome 1
Sequence ID: CP047330.1 Length: 3580756
Range 1: 2527211 to 2527822

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2527211	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2527270
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2527271	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	2527330
Query	121	ACGGTTCGGAAGAAGTTTGCAGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2527331	ACGGTTCGGAAGAAGTTTGCAGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2527390
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	2527391	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	2527450
Query	241	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAATAAATCTGAAAGTG	300
Sbjct	2527451	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAATAAATCTGAAAGTG	2527510
Query	301	TTACTGGCGGGAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2527511	TTACTGGCGGGAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2527570
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	420
Sbjct	2527571	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	2527630
Query	421	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2527631	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2527690
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	2527691	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTAAA	2527750
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCAAATACCAAA	600
Sbjct	2527751	AAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCAAACACCAAA	2527810
Query	601	ATCGACTACTGA 612	
Sbjct	2527811	ATCGACTACTGA 2527822	

>Leptospira borgpetersenii str. 4E chromosome 1
Sequence ID: CP015814.2 Length: 3550837
Range 1: 2151282 to 2151893

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2151282	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2151341
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2151342	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	2151401

Query	121	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2151402	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2151461
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Sbjct	2151462	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	2151521
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	2151522	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	2151581
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTCCGTTG	360
Sbjct	2151582	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTCCGTTG	2151641
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	2151642	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	2151701
Query	421	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2151702	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2151761
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa	540
Sbjct	2151762	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTAAA	2151821
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	2151822	AAAACCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	2151881
Query	601	ATCGACTACTGA 612	
Sbjct	2151882	ATCGACTACTGA 2151893	

>Leptospira borgpetersenii serovar Ballum strain 56604 chromosome 1, complete sequence
Sequence ID: CP012029.1 Length: 3550837
Range 1: 2151282 to 2151893

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2151282	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2151341
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTGGATTTTGGAAATGCAGAAGTTGTCC	120
Sbjct	2151342	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTGGATTTTGGAAATGCAGAAGTTGTCC	2151401
Query	121	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2151402	ACGGTTCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2151461
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Sbjct	2151462	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	2151521
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300

Sbjct	2151522	 TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAATCTGAAAGTG	2151581
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2151582	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2151641
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	2151642	 ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	2151701
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2151702	 CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2151761
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa	540
Sbjct	2151762	 CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA	2151821
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	2151822	 AAAACCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	2151881
Query	601	ATCGACTACTGA 612	
Sbjct	2151882	 ATCGACTACTGA 2151893	

>Leptospira borgpetersenii serovar Mini leucine-rich repeat protein (LRR) gene, partial cds

Sequence ID: JX522459.1 Length: 612

Range 1: 1 to 612

Score:1125 bits(609), Expect:0.0,

Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGA	60
Sbjct	1	 GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGA	60
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTGGATTTTGGAATGCAGAAGTTGTCC	120
Sbjct	61	 GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTGGATTTTGGAATGCAGAAGTTGTCC	120
Query	121	ACGGTTCGGAAGAAGTTTTCGCTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	121	 ACGGTTCGGAAGAAGTTTTCGCTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Sbjct	181	 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Query	241	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAATCTGAAAGTG	300
Sbjct	241	 TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAATCTGAAAGTG	300
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	301	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420

Sbjct	361	 ATCAAAATTCTATACGTAGATCGGAATAAATTAACTCTAACGGAAACGGATGTGGAAATT	420
Query	421	CTCGCTTCTCTTTCTCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	421	 CTCGCTTCTCTTTCTCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa	540
Sbjct	481	 CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATTTAAAAAGATTGAATATTAAA	540
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA	600
Sbjct	541	 AAAACCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA	600
Query	601	ATCGACTACTGA 612	
Sbjct	601	 ATCGACTACTGA 612	

>Leptospira borgpetersenii serovar Ballum leucine-rich repeat protein (LRR) gene, partial cds

Sequence ID: JX522458.1 Length: 612

Range 1: 1 to 612

Score:1125 bits(609), Expect:0.0,
Identities:611/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGA	60
Sbjct	1	 GGCTTCGTTTGTTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGA	60
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	61	 GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Query	121	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	121	 ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Sbjct	181	 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	241	 TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	301	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	361	 ATCAAAATTCTATACGTAGATCGGAATAAATTAACTCTAACGGAAACGGATGTGGAAATT	420
Query	421	CTCGCTTCTCTTTCTCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	421	 CTCGCTTCTCTTTCTCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa	540

Sbjct	481		CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA	540
Query	541		aaaaCTTCATTAAAGGGAGAGGATGCAGATAAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	541		AAACTTCATTAAAGGGAGAGGATGCAGATAAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Query	601		ATCGACTACTGA	612
Sbjct	601		ATCGACTACTGA	612

>Leptospira borgpetersenii strain 34-PK chromosome 1, complete sequence
Sequence ID: CP097464.1 Length: 3603305
Range 1: 943987 to 944598

Score:1120 bits(606), Expect:0.0,
Identities:610/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	943987	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	944046
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	944047	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	944106
Query	121	ACGGTTCCGGAAGAAGTTTTCGGGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	944107	ACGGTTCCGGAAGAAGTTTTCGGGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	944166
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	944167	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	944226
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	944227	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	944286
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	944287	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	944346
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	944347	ATCAAAATTTTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	944406
Query	421	CTCGCTTCTCTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	944407	CTCGCTTCTCTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	944466
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa	540
Sbjct	944467	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA	944526
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	944527	AAACTTCATTAAAGGGAGAGGATGCAGATAAAATTGCAGGCGATTCTTCCAAACACCAAA	944586
Query	601	ATCGACTACTGA	612

Sbjct 944587 ATCGACTACTGA 944598

>Leptospira borgpetersenii serovar Ceylonica strain Piyasena chromosome 1, complete sequence

Sequence ID: CP026671.1 Length: 3670231

Range 1: 3098426 to 3099037

Score:1114 bits(603), Expect:0.0,

Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Minus

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Query 1      GGCTTCGTTTGTGTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA 60
              |||
Sbjct 3099037 GGCTTCGTTTGTGTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA 3098978

Query 61      GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC 120
              |||
Sbjct 3098977 GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC 3098918

Query 121     ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC 180
              |||
Sbjct 3098917 ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC 3098858

Query 181     AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT 240
              |||
Sbjct 3098857 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT 3098798

Query 241     TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG 300
              |||
Sbjct 3098797 TTCGGAACGATCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG 3098738

Query 301     TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTGTTCTTCCGTTG 360
              |||
Sbjct 3098737 TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTGTTCTTCCGTTG 3098678

Query 361     ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT 420
              |||
Sbjct 3098677 ATCAAAATTTTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT 3098618

Query 421     CTCGCTTCTCTTTCCTCCTTGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG 480
              |||
Sbjct 3098617 CTCGCTTCTCTTTCCTCCTTGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG 3098558

Query 481     CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa 540
              |||
Sbjct 3098557 CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA 3098498

Query 541     aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA 600
              |||
Sbjct 3098497 AAAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAA 3098438

Query 601     ATCGACTACTGA 612
              |||
Sbjct 3098437 ATCGACTACTGA 3098426
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>Leptospira borgpetersenii strain FMAS_AP2 chromosome 1, complete sequence

Sequence ID: CP072630.1 Length: 3595436

Range 1: 939788 to 940399

Score:1114 bits(603), Expect:0.0,
Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	939788	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	939847
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	939848	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTGGATTTTGAATGCAGAAGTTGTCC	939907
Query	121	ACGTTTCCGGAAGAAGTTTTCGGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	939908	ACGTTTCCGGAAGAAGTTTTCGGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	939967
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	939968	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	940027
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	940028	TTCGGGAACGATCTTACAACATTTCCGTCTACGTTTCTAAATTAAAAAATCTGAAAGTG	940087
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	940088	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	940147
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	420
Sbjct	940148	ATCAAAATTTTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	940207
Query	421	CTCGCTTCTCTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	940208	CTCGCTTCTCTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	940267
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	940268	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTAAA	940327
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	940328	AAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	940387
Query	601	ATCGACTACTGA 612	
Sbjct	940388	ATCGACTACTGA 940399	

>Leptospira borgpetersenii strain FMAS_AP3 chromosome 1, complete sequence
Sequence ID: CP072628.1 Length: 3595898
Range 1: 939787 to 940398

Score:1114 bits(603), Expect:0.0,
Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	939787	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	939846
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTGGATTTTGAATGCAGAAGTTGTCC	120

Sbjct	939847	 GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	939906
Query	121	ACGGTTCCGGAAGAAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	939907	ACGGTTCCGGAAGAAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	939966
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	939967	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	940026
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	940027	TTCGGGAACGATCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	940086
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	940087	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	940146
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	940147	ATCAAAATTTTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	940206
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	940207	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	940266
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	940267	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTAAA	940326
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	940327	AAAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	940386
Query	601	ATCGACTACTGA 612	
Sbjct	940387	ATCGACTACTGA 940398	

>Leptospira borgpetersenii strain FMAS_AP4 chromosome 1, complete sequence
Sequence ID: CP072626.1 Length: 3595848
Range 1: 939937 to 940548

Score:1114 bits(603), Expect:0.0,
Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGT TTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	939937	GGCTTCGTTTGT TTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	939996
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	939997	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	940056
Query	121	ACGGTTCCGGAAGAAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	940057	ACGGTTCCGGAAGAAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	940116
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240

Sbjct	940117	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	940176
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	940177	TTCGGGAACGATCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	940236
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTCTTCCGTTG	360
Sbjct	940237	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTCTTCCGTTG	940296
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	940297	ATCAAAATTTTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	940356
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	940357	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	940416
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	940417	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTAAA	940476
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	940477	AAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	940536
Query	601	ATCGACTACTGA 612	
Sbjct	940537	ATCGACTACTGA 940548	

>Leptospira borgpetersenii strain FMAS_PN1 chromosome 1, complete sequence
Sequence ID: CP072624.1 Length: 3596207
Range 1: 940706 to 941317

Score:1114 bits(603), Expect:0.0,
Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	940706	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	940765
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	940766	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTGGATTTTGAATGCAGAAGTTGTCC	940825
Query	121	ACGGTTCCGGAAGAAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	940826	ACGGTTCCGGAAGAAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	940885
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	940886	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	940945
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	940946	TTCGGGAACGATCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	941005
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTCTTCCGTTG	360
Sbjct	941006	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTCTTCCGTTG	941065

Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTA	420
Sbjct	941066	ATCAAAATTTTATACGTAGATCGGAATAAATTA	941125
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	941126	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	941185
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa	540
Sbjct	941186	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA	941245
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	941246	AAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	941305
Query	601	ATCGACTACTGA 612	
Sbjct	941306	ATCGACTACTGA 941317	

>Leptospira borgpetersenii strain FMAS_PN4 chromosome 1, complete sequence
Sequence ID: CP072622.1 Length: 3595796
Range 1: 940221 to 940832

Score:1114 bits(603), Expect:0.0,
Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTGTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	940221	GGCTTCGTTTGTGTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	940280
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGGGAATGCAGAAGTTGTCC	120
Sbjct	940281	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGGGAATGCAGAAGTTGTCC	940340
Query	121	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	940341	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	940400
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	940401	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	940460
Query	241	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	940461	TTCGGAACGATCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	940520
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTTGTCTTCCGTTG	360
Sbjct	940521	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTTGTCTTCCGTTG	940580
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTA	420
Sbjct	940581	ATCAAAATTTTATACGTAGATCGGAATAAATTA	940640
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	940641	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	940700

Query	481	CTCCCTTTTAAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa	540
Sbjct	940701	CTCCCTTTTAAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTAAA	940760
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	940761	AAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	940820
Query	601	ATCGACTACTGA 612	
Sbjct	940821	ATCGACTACTGA 940832	

>Leptospira borgpetersenii strain FMAS_AP8 chromosome 1, complete sequence
Sequence ID: CP072620.1 Length: 3595870
Range 1: 939788 to 940399

Score:1114 bits(603), Expect:0.0,
Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	939788	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	939847
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	939848	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTGGATTTTGAATGCAGAAGTTGTCC	939907
Query	121	ACGTTTCCGGAAGAAGTTTTCGGTTCCTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	939908	ACGTTTCCGGAAGAAGTTTTCGGTTCCTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	939967
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	939968	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	940027
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	940028	TTCGGGAACGATCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	940087
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	940088	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	940147
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	420
Sbjct	940148	ATCAAAATTTTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	940207
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	940208	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	940267
Query	481	CTCCCTTTTAAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa	540
Sbjct	940268	CTCCCTTTTAAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTAAA	940327
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	940328	AAACTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAAA	940387
Query	601	ATCGACTACTGA 612	

Sbjct 940388 ||||| ATCGACTACTGA 940399

>Leptospira borgpetersenii strain FMAS_AP9 chromosome 1, complete sequence
Sequence ID: CP072618.1 Length: 3595582
Range 1: 2369403 to 2370014

Score:1114 bits(603), Expect:0.0,
Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Minus

Query	1	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGA	60
Sbjct	2370014	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGA	2369955
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2369954	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	2369895
Query	121	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2369894	ACGGTTCGGAAGAAGTTTTCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2369835
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Sbjct	2369834	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	2369775
Query	241	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAATCTGAAAGTG	300
Sbjct	2369774	TTCGGAACGATCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAATCTGAAAGTG	2369715
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	2369714	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	2369655
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT	420
Sbjct	2369654	ATCAAAATTTTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT	2369595
Query	421	CTCGCTTCTCTTTCCTCCTTGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2369594	CTCGCTTCTCTTTCCTCCTTGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2369535
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa	540
Sbjct	2369534	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTAAA	2369475
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA	600
Sbjct	2369474	AAAACCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAACACCAA	2369415
Query	601	ATCGACTACTGA 612	
Sbjct	2369414	ATCGACTACTGA 2369403	

>Leptospira borgpetersenii serovar Javanica leucine-rich repeat protein (LRR) gene,
partial cds
Sequence ID: JX522457.1 Length: 612

Range 1: 1 to 612

Score:1114 bits(603), Expect:0.0,
Identities:609/612(99%), Gaps:0/612(0%), Strand: Plus/Plus

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Query 1      GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA 60
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 1      GGCTTCCTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA 60

Query 61     GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC 120
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 61     GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC 120

Query 121    ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC 180
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 121    ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC 180

Query 181    AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT 240
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 181    AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT 240

Query 241    TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG 300
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 241    TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG 300

Query 301    TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG 360
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 301    TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG 360

Query 361    ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT 420
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 361    ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAACGGATGTGGAAATT 420

Query 421    CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG 480
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 421    CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG 480

Query 481    CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa 540
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 481    CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATTTAAAAAGATTGAATATTAAA 540

Query 541    aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCAAATACCAA 600
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 541    AAAAATTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCGAAATACCAA 600

Query 601    ATCGACTACTGA 612
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 601    ATCGACTACTGA 612
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>Leptospira borgpetersenii serovar Hardjo strain NVSL S 818 chromosome 1
Sequence ID: CP015052.1 Length: 3584464
Range 1: 2714429 to 2715040

Score:1070 bits(579), Expect:0.0,
Identities:601/612(98%), Gaps:0/612(0%), Strand: Plus/Minus

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Query 1      GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA 60
          |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
Sbjct 2715040 GGCTTCGTTTGTCTTACTGCGAGTTTCAACTGTAAAAAGAATGCGGAAGAGATTTTGGGA 2714981
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Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2714980	GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC	2714921
Query	121	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2714920	ACGGTTCCGGAAGGAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2714861
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240
Sbjct	2714860	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	2714801
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	2714800	TTCGGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	2714741
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTTGTTTCTTCCGTTG	360
Sbjct	2714740	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTTGTTTCTTCCATTG	2714681
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACCGAAACGGATGTGGAAATT	420
Sbjct	2714680	ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACCGAAACGGATGTGGAAATT	2714621
Query	421	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2714620	CTCGCTTCTCTTTCCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2714561
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAAATCTAAAAAGATTGAATATTaaa	540
Sbjct	2714560	CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAAATTTAAAAAGATTGAATATTAAA	2714501
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA	600
Sbjct	2714500	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA	2714441
Query	601	ATCGACTACTGA 612	
Sbjct	2714440	ATCGACTACTGA 2714429	

>Leptospira borgpetersenii serovar Hardjo-bovis JB197 chromosome 1, complete sequence
Sequence ID: CP000350.1 Length: 3576473
Range 1: 2702099 to 2702710

Score:1070 bits(579), Expect:0.0,
Identities:601/612(98%), Gaps:0/612(0%), Strand: Plus/Minus

Query	1	GGCTTCGTTTGTTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	2702710	GGCTTCGTTTGTTTTACTGCGAGTTTCAACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	2702651
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	2702650	GAGGCAAAGGCAAACCGGAATTGGTTCAAACTTTGGATTTTGAATGCAGAAGTTGTCC	2702591
Query	121	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	2702590	ACGGTTCCGGAAGGAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	2702531
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACTTAATCTT	240

Sbjct	2702530	 AGTTTGACTTTTCTTCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	2702471
Query	241	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	2702470	 TTCGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	2702411
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTTGTTTCTTCCGTTG	360
Sbjct	2702410	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTTGTTTCTTCCATTG	2702351
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	2702350	 ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	2702291
Query	421	CTCGCTTCTCTTTCTCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	2702290	 CTCGCTTCTCTTTCTCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	2702231
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAACTCTAAAAAGATTGAATATTaaa	540
Sbjct	2702230	 CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAAATTTAAAAAGATTGAATATTAAA	2702171
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA	600
Sbjct	2702170	 AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAA	2702111
Query	601	ATCGACTACTGA 612 	
Sbjct	2702110	ATCGACTACTGA 2702099	

>Leptospira borgpetersenii serovar Hardjo-bovis strain L49 chromosome 1, complete sequence
Sequence ID: CP033440.1 Length: 3620710
Range 1: 946028 to 946639

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTGGGA	60
Sbjct	946028	 GGCTTCGTTTGTCTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTGGGA	946087
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGGAATGCAGAAGTTGTCC	120
Sbjct	946088	 GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGGAATGCAGAAGTTGTCC	946147
Query	121	ACGGTTCCGGAAGAAGTTTGCAGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	946148	 ACGGTTCCGGAAGGAGTTTGCAGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	946207
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	946208	 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	946267
Query	241	TTCGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	946268	 TTCGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	946327
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTTGTTTCTTCCGTTG	360

Sbjct	946328	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCTTCCGAACCTTTGTTTCTTCCATTG	946387
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	946388	 ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	946447
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	946448	 CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	946507
Query	481	CTCCCTTTTAATTACGAAAACTTGTAAATCTCATTAACTCTAAAAAGATTGAATATTaaa	540
Sbjct	946508	 CTTCCTTTTAATTACGAAAACTTGTGAATCTCATTAAATTTAAAAAGATTGAATATTAAA	946567
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	946568	 AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	946627
Query	601	ATCGACTACTGA 612	
Sbjct	946628	 ATCGACTACTGA 946639	

>Leptospira borgpetersenii serovar Hardjo-bovis strain 203 chromosome I, complete sequence
Sequence ID: CP021412.1 Length: 3589981
Range 1: 940162 to 940773

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTGTTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	940162	 GGCTTCGTTTGTGTTTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	940221
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	940222	 GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	940281
Query	121	ACGTTTCCGGAAGAAGTTTGCAGTTTTCGGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	940282	 ACGTTTCCGGAAGGAGTTTGCAGTTTTCGGAATTTAACCAAGTTGGATCTTCGTTTAAAC	940341
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	940342	 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	940401
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	940402	 TTCGGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	940461
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	940462	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCTTCCGAACCTTTGTTTCTTCCATTG	940521
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	940522	 ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	940581
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480

Sbjct	940582	 CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	940641
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	940642	 CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	940701
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	940702	 AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	940761
Query	601	ATCGACTACTGA 612	
Sbjct	940762	 ATCGACTACTGA 940773	

>Leptospira borgpetersenii serovar Hardjo strain NVSL S 1343 chromosome 1
Sequence ID: CP015050.1 Length: 3613654
Range 1: 978860 to 979471

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	978860	 GGCTTCGTTTGTCTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	978919
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	978920	 GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	978979
Query	121	ACGGTTCCGGAAGAAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	978980	 ACGGTTCCGGAAGGAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	979039
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	979040	 AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	979099
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	979100	 TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	979159
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	979160	 TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCATTG	979219
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	979220	 ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	979279
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	979280	 CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	979339
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	979340	 CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	979399
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600

Sbjct	979400	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	979459
Query	601	ATCGACTACTGA 612	
Sbjct	979460	ATCGACTACTGA 979471	

>Leptospira borgpetersenii serovar Hardjo strain BK-30 chromosome 1
Sequence ID: CP015048.1 Length: 3629289
Range 1: 979247 to 979858

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	979247	GGCTTCGTTTGTCTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	979306
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	979307	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	979366
Query	121	ACGGTTCCGGAAGAAGTTTGCAGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	979367	ACGGTTCCGGAAGGAGTTTGCAGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	979426
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	979427	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	979486
Query	241	TTGCGGAACGACCTTACAACATTTCCGTCTACGTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	979487	TTGCGGAACGACCTTACGACATTTCCGTCTACGTTTCTAAATTAAAAAATCTGAAAGTG	979546
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	979547	TTACTGGCGGGAAATAACGATTTTACGATTCTACCTCCGAACCTTTGTTTCTTCCATTG	979606
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	420
Sbjct	979607	ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAACGGATGTGGAAATT	979666
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	979667	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	979726
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	979727	CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	979786
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	979787	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	979846
Query	601	ATCGACTACTGA 612	
Sbjct	979847	ATCGACTACTGA 979858	

>Leptospira borgpetersenii serovar Hardjo strain BK-9 chromosome 1
Sequence ID: CP015046.1 Length: 3631634
Range 1: 979077 to 979688

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	979077	GGCTTCGTTTGTCTTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	979136
Query	61	GAGGCAAAGGCCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	979137	GAGGCAAAGGCCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	979196
Query	121	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	979197	ACGGTTCCGGAAGGAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	979256
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	979257	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	979316
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	979317	TTCGGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	979376
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	979377	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCATTG	979436
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	420
Sbjct	979437	ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAACGGATGTGGAAATT	979496
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	979497	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	979556
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	979557	CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	979616
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	979617	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	979676
Query	601	ATCGACTACTGA 612	
Sbjct	979677	ATCGACTACTGA 979688	

>Leptospira borgpetersenii serovar Hardjo strain BK-6 chromosome 1
Sequence ID: CP015044.1 Length: 3649879
Range 1: 977825 to 978436

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60

Sbjct	977825	GGCTTCGTTTGTGTTTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	977884
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	977885	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	977944
Query	121	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	977945	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	978004
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	978005	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	978064
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	978065	TTCGGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	978124
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	978125	TTACTGGCGGGAAATAACGATTTTACGATTCTACCTCCGAACCTTTGTTTCTTCCATTG	978184
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	978185	ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	978244
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	978245	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	978304
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	978305	CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	978364
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	978365	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	978424
Query	601	ATCGACTACTGA 612	
Sbjct	978425	ATCGACTACTGA 978436	

>Leptospira borgpetersenii strain KR39 chromosome 1, complete sequence

Sequence ID: CP096127.1 Length: 3603773

Range 1: 936053 to 936664

Score:1064 bits(576), Expect:0.0,

Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTGTTTTACTGCGAGTTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	936053	GGCTTCGTTTGTGTTTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	936112
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	936113	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	936172
Query	121	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	936173	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	936232

Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	936233	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	936292
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	936293	TTCGGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	936352
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTTCCGTTG	360
Sbjct	936353	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTTCCATTG	936412
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	936413	ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	936472
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	936473	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	936532
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	936533	CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	936592
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	936593	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	936652
Query	601	ATCGACTACTGA 612	
Sbjct	936653	ATCGACTACTGA 936664	

>Leptospira borgpetersenii serovar Hardjo strain TC129 chromosome I, complete sequence
Sequence ID: CP084038.1 Length: 3585597
Range 1: 935940 to 936551

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	935940	GGCTTCGTTTGTCTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	935999
Query	61	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	936000	GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	936059
Query	121	ACGGTTCCGGAAGAAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	936060	ACGGTTCCGGAAGGAGTTTGCGGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	936119
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	936120	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	936179
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	936180	TTCGGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	936239

Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTTCCGTTG	360
Sbjct	936240	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTTCCATTG	936299
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	936300	ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	936359
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	936360	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	936419
Query	481	CTCCCTTTTAAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	936420	CTTCCTTTTAAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	936479
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	936480	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	936539
Query	601	ATCGACTACTGA 612	
Sbjct	936540	ATCGACTACTGA 936551	

>Leptospira borgpetersenii strain TC147 chromosome I, complete sequence
Sequence ID: CP084040.1 Length: 3585599
Range 1: 935940 to 936551

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTTCCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	935940	GGCTTCGTTTGTTCCTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	935999
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	936000	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	936059
Query	121	ACGTTTCCGGAAGAAGTTTGCAGTTTTCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	936060	ACGTTTCCGGAAGGAGTTTGCAGTTTTCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	936119
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	936120	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	936179
Query	241	TTTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	936180	TTTCGGGAACGACCTTACGACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	936239
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTTCCGTTG	360
Sbjct	936240	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACTTTGTTCCTTCCATTG	936299
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	936300	ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	936359
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480

Sbjct	936360		CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	936419
Query	481		CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	936420		CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	936479
Query	541		aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	936480		AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	936539
Query	601		ATCGACTACTGA 612	
Sbjct	936540		ATCGACTACTGA 936551	

>Leptospira borgpetersenii strain TC273 chromosome I, complete sequence
Sequence ID: CP084042.1 Length: 3585577
Range 1: 935929 to 936540

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1		GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	935929		GGCTTCGTTTGTCTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	935988
Query	61		GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	935989		GAGGCAAAGGCAAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	936048
Query	121		ACGGTTCCGGAAGAAGTTTGCAGTTTTCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	936049		ACGGTTCCGGAAGGAGTTTGCAGTTTTCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	936108
Query	181		AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	936109		AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	936168
Query	241		TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	936169		TTCGGGAACGACCTTACGACATTTCCGTCTACGTTTCTAAATTAAAAAATCTGAAAGTG	936228
Query	301		TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	936229		TTACTGGCGGGAAATAACGATTTTACGATTCTACCTTCCGAACCTTTGTTTCTTCCATTG	936288
Query	361		ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTCTAACGGAAACGGATGTGGAAATT	420
Sbjct	936289		ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	936348
Query	421		CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	936349		CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	936408
Query	481		CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	936409		CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	936468
Query	541		aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600

Sbjct	936469	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	936528
Query	601	ATCGACTACTGA 612	
Sbjct	936529	ATCGACTACTGA 936540	

>Leptospira borgpetersenii strain TC112 chromosome I, complete sequence
Sequence ID: CP084036.1 Length: 3585599
Range 1: 935940 to 936551

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	935940	GGCTTCGTTTGTCTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	935999
Query	61	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	936000	GAGGCAAAGGCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	936059
Query	121	ACGGTTCCGGAAGAAGTTTGCAGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	936060	ACGGTTCCGGAAGGAGTTTGCAGTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	936119
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	936120	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	936179
Query	241	TTGCGGAACGACCTTACAACATTTCCGTCTACGTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	936180	TTGCGGAACGACCTTACGACATTTCCGTCTACGTTTCTAAATTAAAAAATCTGAAAGTG	936239
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	936240	TTACTGGCGGGAAATAACGATTTTACGATTCTACCTCCGAACCTTTGTTTCTTCCATTG	936299
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAACGGATGTGGAAATT	420
Sbjct	936300	ATCAAAATTTTATACGTAGATCGGAATAAATTAATCTAACGGAACGGATGTGGAAATT	936359
Query	421	CTCGCTTCTCTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	936360	CTCGCTTCTCTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	936419
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	936420	CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	936479
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	936480	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	936539
Query	601	ATCGACTACTGA 612	
Sbjct	936540	ATCGACTACTGA 936551	

>Leptospira borgpetersenii serovar Hardjo-bovis L550 chromosome 1, complete sequence
Sequence ID: CP000348.1 Length: 3614446
Range 1: 969260 to 969871

Score:1064 bits(576), Expect:0.0,
Identities:600/612(98%), Gaps:0/612(0%), Strand: Plus/Plus

Query	1	GGCTTCGTTTGTCTTACTGCGAGTTTCGACTGTAAAAAGAATGCGGAAGAGATTTTGGGA	60
Sbjct	969260	GGCTTCGTTTGTCTTACTGCGAGTTTCAATTGTAAAAAGAATGCGGAAGAGATTTTGGGA	969319
Query	61	GAGGCAAAGGCCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	120
Sbjct	969320	GAGGCAAAGGCCAAACCGGAATTGGTTCAAACCTTTGGATTTTGAATGCAGAAGTTGTCC	969379
Query	121	ACGGTTCCGGAAGAAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	180
Sbjct	969380	ACGGTTCCGGAAGGAGTTTGC GGTTTTCCGAATTTAACCAAGTTGGATCTTCGTTTAAAC	969439
Query	181	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	240
Sbjct	969440	AGTTTGACTTTTCTTCCGGAATTTATCGGAGAATGTAAACGCCTTGAACAACCTTAATCTT	969499
Query	241	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	300
Sbjct	969500	TTCGGGAACGACCTTACAACATTTCCGTCTACGTTTTCTAAATTAAAAAATCTGAAAGTG	969559
Query	301	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCGTTG	360
Sbjct	969560	TTACTGGCGGGAAATAACGATTTTACGATTCTACCCTCCGAACCTTTGTTTCTTCCATTG	969619
Query	361	ATCAAAATTCTATACGTAGATCGGAATAAATTAACCTAACGGAAACGGATGTGGAAATT	420
Sbjct	969620	ATCAAAATTTTATACGTAGATCGGAATAAATTAATTCTAACGGAAACGGATGTGGAAATT	969679
Query	421	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	480
Sbjct	969680	CTCGCTTCTCTTTCTCCTTGGAGGAATTGGATCTGAGTCTGAATTCGGGGATTAAGGCG	969739
Query	481	CTCCCTTTTAATTACGAAAACTTGTAATCTCATTAATCTAAAAAGATTGAATATTaaa	540
Sbjct	969740	CTTCCTTTTAATTACGAAAACTTGTAATCTCATTAATTTAAAAAGATTGAATATTAAA	969799
Query	541	aaaaCTTCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	600
Sbjct	969800	AAAACATCATTAAAGGGAGAGGATGCAGATAAATTGCAGGCGATTCTTCCAAATACCAAA	969859
Query	601	ATCGACTACTGA	612
Sbjct	969860	ATCGACTACTGA	969871