

BLAST Basic Local Alignment Search Tool

Job Title: Borrprobe

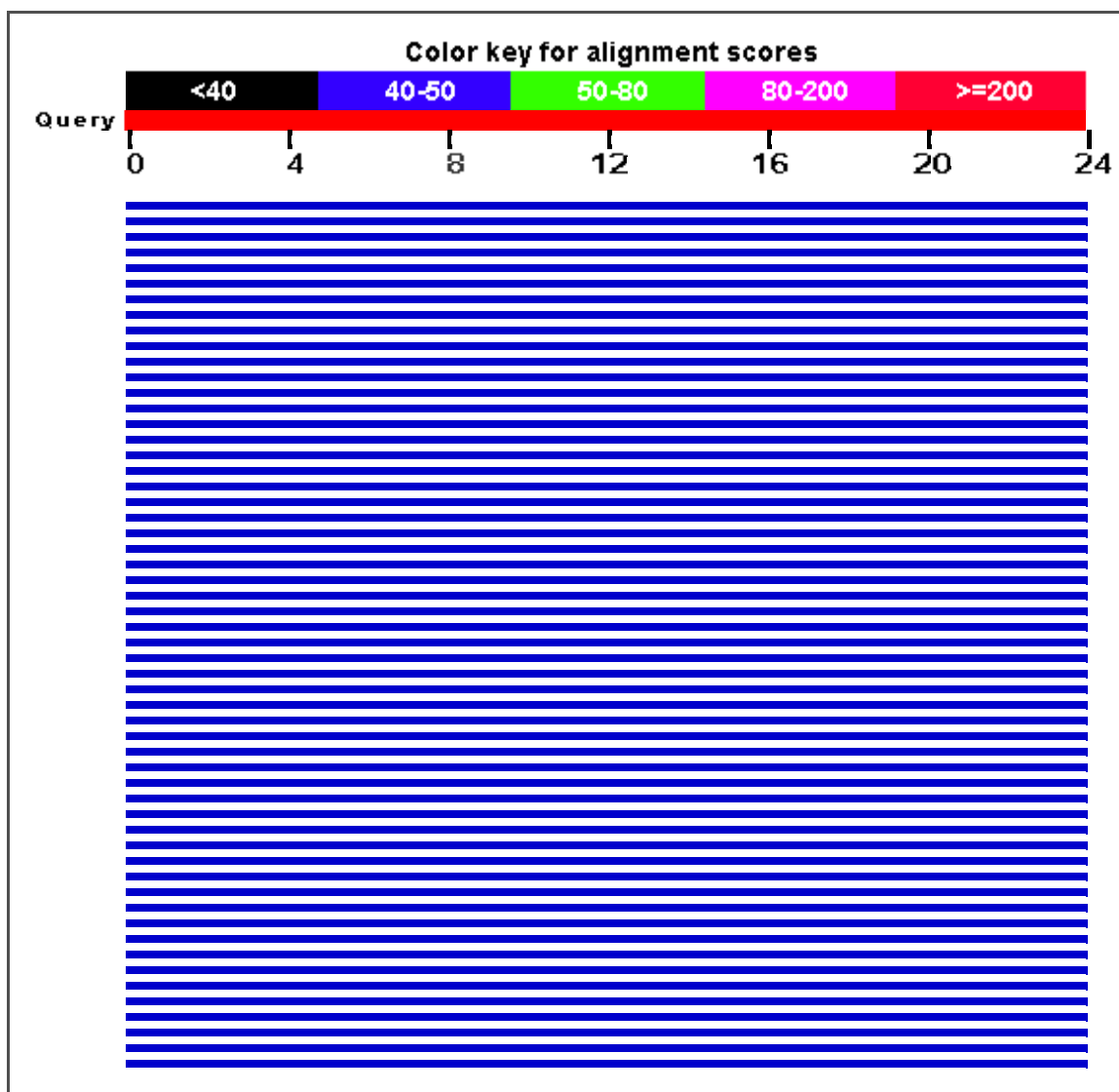
- Your search parameters were adjusted to search for a short input sequence.

BLASTN 2.2.17 (Aug-26-2007)

Reference: Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", *Nucleic Acids Res.* 25:3389-3402. RID: PMMBW6XP013 **Database:** All GenBank+EMBL+DDBJ+PDB sequences (but no EST, STS, GSS, environmental samples or phase 0, 1 or 2 HTGS sequences) 6,196,379 sequences; 22,410,130,487 total letters

Query= Borrprobe Length=24

Distribution of 100 Blast Hits on the Query Sequence



Distance tree of results **NEW**Legend for links to other resources: [U](#) UniGene [E](#) GEO [G](#) Gene [S](#) Structure [M](#) I**Sequences producing significant alignments:**

(Click headers to sort columns)

EU240885.1	Borrelia sp. BR 2007 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU240883.1	Borrelia theileri 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AB330849.1	Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: TP4_L	48.1	48.1	100%	4e-04	100%
EF141021.1	Borrelia sp. BR 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025065.1	Borrelia burgdorferi isolate MI-1 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025064.1	Borrelia burgdorferi isolate SCW-60 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025063.1	Borrelia burgdorferi isolate SCW-59 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025062.1	Borrelia burgdorferi isolate SCW-58 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025061.1	Borrelia burgdorferi isolate SCW-57 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025060.1	Borrelia burgdorferi isolate SCW-54 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025059.1	Borrelia burgdorferi isolate SCW-61 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025058.1	Borrelia burgdorferi isolate SCW-48 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025057.1	Borrelia burgdorferi isolate SCW-47 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025056.1	Borrelia burgdorferi isolate SCW-44 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025055.1	Borrelia burgdorferi isolate SCW-43 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025054.1	Borrelia burgdorferi isolate SCW-12 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025053.1	Borrelia burgdorferi isolate SCW-9 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025052.1	Borrelia burgdorferi isolate SCW-6 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025051.1	Borrelia burgdorferi isolate SCW-4 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025050.1	Borrelia burgdorferi isolate SCW-2 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025049.1	Borrelia burgdorferi isolate SI-18 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025048.1	Borrelia burgdorferi isolate SI-17 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025047.1	Borrelia burgdorferi isolate SI-16 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025046.1	Borrelia burgdorferi isolate SI-19 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025045.1	Borrelia burgdorferi isolate SI-14 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025044.1	Borrelia burgdorferi isolate SCSC-6 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%

EU025043.1	<i>Borrelia burgdorferi</i> isolate SCSC-5 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025042.1	<i>Borrelia burgdorferi</i> isolate SCSC-3 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025041.1	<i>Borrelia burgdorferi</i> isolate SCSC-2 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025040.1	<i>Borrelia burgdorferi</i> isolate SCI-1 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025039.1	<i>Borrelia burgdorferi</i> isolate SCGT-17 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025038.1	<i>Borrelia burgdorferi</i> isolate SCGT-16 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025037.1	<i>Borrelia burgdorferi</i> isolate SCGT-7 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025036.1	<i>Borrelia burgdorferi</i> isolate SCGT-4 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025035.1	<i>Borrelia burgdorferi</i> isolate SCCH-30 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025034.1	<i>Borrelia burgdorferi</i> isolate SCCH-28 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025033.1	<i>Borrelia burgdorferi</i> isolate SCCH-25 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025032.1	<i>Borrelia burgdorferi</i> isolate SCCH-24 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025031.1	<i>Borrelia burgdorferi</i> isolate SCCH-31 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025030.1	<i>Borrelia burgdorferi</i> isolate BUL-8 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU025029.1	<i>Borrelia burgdorferi</i> isolate BUL-3 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014810.1	<i>Borrelia burgdorferi</i> isolate SCW-3 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014809.1	<i>Borrelia burgdorferi</i> isolate SCw-62 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014808.1	<i>Borrelia burgdorferi</i> isolate SCW-53 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014807.1	<i>Borrelia burgdorferi</i> isolate SCW-25 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014806.1	<i>Borrelia burgdorferi</i> isolate SI-15 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014805.1	<i>Borrelia burgdorferi</i> isolate SCI-1 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014804.1	<i>Borrelia burgdorferi</i> isolate SCCH-19 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014803.1	<i>Borrelia burgdorferi</i> isolate SCCH-13 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014802.1	<i>Borrelia burgdorferi</i> isolate SCCH-9 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014801.1	<i>Borrelia burgdorferi</i> isolate SCCH-3 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014800.1	<i>Borrelia burgdorferi</i> isolate BUL-10 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014799.1	<i>Borrelia burgdorferi</i> isolate BUL-6 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014798.1	<i>Borrelia burgdorferi</i> isolate BUL-5 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014797.1	<i>Borrelia burgdorferi</i> isolate BUL-4 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
EU014796.1	<i>Borrelia burgdorferi</i> isolate BUL-1 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%

EF641295.1	<i>Borrelia hermsii</i> strain LPO 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
EF541175.1	<i>Borrelia afzelii</i> strain Nov1105 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
EF541174.1	<i>Borrelia afzelii</i> strain Nov11506 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ872186.1	<i>Borrelia theileri</i> 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ855530.1	<i>Borrelia hermsii</i> isolate MAT 16S ribosomal RNA gene, complete sequence	48.1	48.1	100%	4e-04	100%
DQ855529.1	<i>Borrelia hermsii</i> isolate LAK-5 16S ribosomal RNA gene, complete sequence	48.1	48.1	100%	4e-04	100%
DQ855528.1	<i>Borrelia hermsii</i> isolate LAK-4 16S ribosomal RNA gene, complete sequence	48.1	48.1	100%	4e-04	100%
DQ855527.1	<i>Borrelia hermsii</i> isolate LAK-3 16S ribosomal RNA gene, complete sequence	48.1	48.1	100%	4e-04	100%
AY934610.1	<i>Borrelia turicatae</i> isolate TCB-2 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934609.1	<i>Borrelia turicatae</i> isolate TCB-1 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934608.1	<i>Borrelia turicatae</i> isolate PE1-926 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934607.1	<i>Borrelia turicatae</i> isolate 99PE-1807 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934606.1	<i>Borrelia turicatae</i> isolate 95PE-570 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934605.1	<i>Borrelia turicatae</i> isolate RML 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934598.1	<i>Borrelia parkeri</i> isolate CA221 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934597.1	<i>Borrelia parkeri</i> isolate CA220 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934596.1	<i>Borrelia parkeri</i> isolate CA219 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934595.1	<i>Borrelia parkeri</i> isolate CA218 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY934594.1	<i>Borrelia parkeri</i> isolate CA216 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY253149.1	<i>Borrelia</i> sp. MK-N61 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393306.1	<i>Borrelia valaisiana</i> strain M7 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393305.1	<i>Borrelia valaisiana</i> strain Am501 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393304.1	<i>Borrelia californiensis</i> strain CA443 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393303.1	<i>Borrelia californiensis</i> strain CA404 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393302.1	<i>Borrelia andersonii</i> strain 19952 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393301.1	<i>Borrelia andersonii</i> strain 21133 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393300.1	<i>Borrelia andersonii</i> strain 21123 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393299.1	<i>Borrelia burgdorferi</i> strain 5LM218 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393298.1	<i>Borrelia burgdorferi</i> strain Z51094 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ393297.1	<i>Borrelia burgdorferi</i> strain Sh-2-82 16S ribosomal RNA (rrs) gene, partial sequence	48.1	48.1	100%	4e-04	100%

AY083501.1	<i>Borrelia burgdorferi</i> isolate St4 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY083500.1	<i>Borrelia burgdorferi</i> isolate Na34 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY083499.1	<i>Borrelia burgdorferi</i> isolate To89 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY083498.1	<i>Borrelia burgdorferi</i> isolate To16 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY083497.1	<i>Borrelia burgdorferi</i> isolate To106 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY083496.1	<i>Borrelia burgdorferi</i> isolate Sa5 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY083495.1	<i>Borrelia burgdorferi</i> isolate Osk3 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY083494.1	<i>Borrelia burgdorferi</i> isolate Osk2 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY083493.1	<i>Borrelia burgdorferi</i> isolate Os2 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ346813.1	<i>Borrelia recurrentis</i> isolate A2 16S ribosomal RNA gene, complete sequence	48.1	48.1	100%	4e-04	100%
DQ057990.1	<i>Borrelia crocidurae</i> 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ057989.1	<i>Borrelia crocidurae</i> 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
DQ057988.1	<i>Borrelia hispanica</i> 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%
AY884354.1	<i>Borrelia</i> sp. W97F51 16S ribosomal RNA gene, partial sequence	48.1	48.1	100%	4e-04	100%

Alignments

>gb|EU240885.1| *Borrelia* sp. BR 2007 16S ribosomal RNA gene, partial sequence
Length=809

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

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Query 1   AGTGTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 174 AGTGTCGCTCCGTCAGGCTTTTCGC 151
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>gb|EU240883.1| *Borrelia theileri* 16S ribosomal RNA gene, partial sequence
Length=545

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

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Query 1   AGTGTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 106 AGTGTCGCTCCGTCAGGCTTTTCGC 83
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>dbj|AB330849.1| Uncultured bacterium gene for 16S ribosomal RNA, partial sequence
clone: TP4_L
Length=1131

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

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Query 1   AGTGTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 46  AGTGTCGCTCCGTCAGGCTTTTCGC 23
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>gb|EF141021.1| *Borrelia* sp. BR 16S ribosomal RNA gene, partial sequence
Length=1100

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

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Query 1   AGTGTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 241 AGTGTCGCTCCGTCAGGCTTTTCGC 218
```

>gb|EU025065.1| *Borrelia burgdorferi* isolate MI-1 16S ribosomal RNA (rrs) gene,
partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU025064.1| *Borrelia burgdorferi* isolate SCW-60 16S ribosomal RNA (rrs) gene,
partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU025063.1| *Borrelia burgdorferi* isolate SCW-59 16S ribosomal RNA (rrs) gene,
partial sequence

Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU025062.1** | *Borrelia burgdorferi* isolate SCW-58 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU025061.1** | *Borrelia burgdorferi* isolate SCW-57 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU025060.1** | *Borrelia burgdorferi* isolate SCW-54 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU025059.1** | *Borrelia burgdorferi* isolate SCW-61 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU025058.1** | *Borrelia burgdorferi* isolate SCW-48 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU025057.1** | *Borrelia burgdorferi* isolate SCW-47 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24

Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025056.1| *Borrelia burgdorferi* isolate SCW-44 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025055.1| *Borrelia burgdorferi* isolate SCW-43 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025054.1| *Borrelia burgdorferi* isolate SCW-12 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025053.1| *Borrelia burgdorferi* isolate SCW-9 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025052.1| *Borrelia burgdorferi* isolate SCW-6 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025051.1| *Borrelia burgdorferi* isolate SCW-4 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025050.1| *Borrelia burgdorferi* isolate SCW-2 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
 |||||
 Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025049.1| Borrelia burgdorferi isolate SI-18 16S ribosomal RNA (rrs) gene,
 partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
 |||||
 Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025048.1| Borrelia burgdorferi isolate SI-17 16S ribosomal RNA (rrs) gene,
 partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
 |||||
 Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025047.1| Borrelia burgdorferi isolate SI-16 16S ribosomal RNA (rrs) gene,
 partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
 |||||
 Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025046.1| Borrelia burgdorferi isolate SI-19 16S ribosomal RNA (rrs) gene,
 partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
 |||||
 Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025045.1| Borrelia burgdorferi isolate SI-14 16S ribosomal RNA (rrs) gene,
 partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
 |||||
 Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283

>gb|EU025044.1| Borrelia burgdorferi isolate SCSC-6 16S ribosomal RNA (rrs) gene,
 partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
 |||||

Sbjct 306 AGTGTGCTCCGTCAGGCTTTTCGC 283

>gb|EU025043.1| Borrelia burgdorferi isolate SCSC-5 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCTCCGTCAGGCTTTTCGC 283

>gb|EU025042.1| Borrelia burgdorferi isolate SCSC-3 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCTCCGTCAGGCTTTTCGC 283

>gb|EU025041.1| Borrelia burgdorferi isolate SCSC-2 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCTCCGTCAGGCTTTTCGC 283

>gb|EU025040.1| Borrelia burgdorferi isolate SCI-1 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCTCCGTCAGGCTTTTCGC 283

>gb|EU025039.1| Borrelia burgdorferi isolate SCGT-17 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCTCCGTCAGGCTTTTCGC 283

>gb|EU025038.1| Borrelia burgdorferi isolate SCGT-16 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCTCCGTCAGGCTTTTCGC 283

>gb|EU025037.1| Borrelia burgdorferi isolate SCGT-7 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU025036.1**| *Borrelia burgdorferi* isolate SCGT-4 16S ribosomal RNA (rrs) gene, partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU025035.1**| *Borrelia burgdorferi* isolate SCCH-30 16S ribosomal RNA (rrs) gene, partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU025034.1**| *Borrelia burgdorferi* isolate SCCH-28 16S ribosomal RNA (rrs) gene, partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU025033.1**| *Borrelia burgdorferi* isolate SCCH-25 16S ribosomal RNA (rrs) gene, partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU025032.1**| *Borrelia burgdorferi* isolate SCCH-24 16S ribosomal RNA (rrs) gene, partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU025031.1**| *Borrelia burgdorferi* isolate SCCH-31 16S ribosomal RNA (rrs) gene, partial sequence
 Length=1362

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU025030.1| *Borrelia burgdorferi* isolate BUL-8 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU025029.1| *Borrelia burgdorferi* isolate BUL-3 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU014810.1| *Borrelia burgdorferi* isolate SCW-3 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU014809.1| *Borrelia burgdorferi* isolate SCw-62 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU014808.1| *Borrelia burgdorferi* isolate SCW-53 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU014807.1| *Borrelia burgdorferi* isolate SCW-25 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306 AGTGTTCGCTCCGTCAGGCTTTTCGC 283
```

>gb|EU014806.1| *Borrelia burgdorferi* isolate SI-15 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04

Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTGCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306  AGTGTGCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU014805.1**| *Borrelia burgdorferi* isolate SCI-1 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTGCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306  AGTGTGCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU014804.1**| *Borrelia burgdorferi* isolate SCCH-19 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTGCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306  AGTGTGCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU014803.1**| *Borrelia burgdorferi* isolate SCCH-13 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTGCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306  AGTGTGCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU014802.1**| *Borrelia burgdorferi* isolate SCCH-9 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTGCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306  AGTGTGCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU014801.1**| *Borrelia burgdorferi* isolate SCCH-3 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTGCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306  AGTGTGCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU014800.1**| *Borrelia burgdorferi* isolate BUL-10 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTGCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 306  AGTGTGCGCTCCGTCAGGCTTTTCGC 283
```

>**gb|EU014799.1** | *Borrelia burgdorferi* isolate BUL-6 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU014798.1** | *Borrelia burgdorferi* isolate BUL-5 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU014797.1** | *Borrelia burgdorferi* isolate BUL-4 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCGCTCCGTCAGGCTTTTCGC 283

>**gb|EU014796.1** | *Borrelia burgdorferi* isolate BUL-1 16S ribosomal RNA (rrs) gene, partial sequence
Length=1362

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 306 AGTGTGCGCTCCGTCAGGCTTTTCGC 283

>**gb|EF641295.1** | *Borrelia hermsii* strain LPO 16S ribosomal RNA gene, partial sequen
Length=1257

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 331 AGTGTGCGCTCCGTCAGGCTTTTCGC 308

>**gb|EF541175.1** | *Borrelia afzelii* strain Nov1105 16S ribosomal RNA gene, partial sequence
Length=1294

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTGCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 331 AGTGTGCGCTCCGTCAGGCTTTTCGC 308

>**gb|EF541174.1** | *Borrelia afzelii* strain Nov11506 16S ribosomal RNA gene, partial sequence
Length=1294

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```

Query 1      AGTGTCGCTCCGTCAGGCTTTTCGC  24
             |||
Sbjct 331    AGTGTCGCTCCGTCAGGCTTTTCGC  308

```

>gb|DQ872186.1| *Borrelia theileri* 16S ribosomal RNA (rrs) gene, partial sequence
Length=1183

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```

Query 1      AGTGTCGCTCCGTCAGGCTTTTCGC  24
             |||
Sbjct 289    AGTGTCGCTCCGTCAGGCTTTTCGC  266

```

>gb|DQ855530.1| *Borrelia hermsii* isolate MAT 16S ribosomal RNA gene, complete sequence
Length=1273

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```

Query 1      AGTGTCGCTCCGTCAGGCTTTTCGC  24
             |||
Sbjct 300    AGTGTCGCTCCGTCAGGCTTTTCGC  277

```

>gb|DQ855529.1| *Borrelia hermsii* isolate LAK-5 16S ribosomal RNA gene, complete sequence
Length=1273

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```

Query 1      AGTGTCGCTCCGTCAGGCTTTTCGC  24
             |||
Sbjct 300    AGTGTCGCTCCGTCAGGCTTTTCGC  277

```

>gb|DQ855528.1| *Borrelia hermsii* isolate LAK-4 16S ribosomal RNA gene, complete sequence
Length=1273

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```

Query 1      AGTGTCGCTCCGTCAGGCTTTTCGC  24
             |||
Sbjct 300    AGTGTCGCTCCGTCAGGCTTTTCGC  277

```

>gb|DQ855527.1| *Borrelia hermsii* isolate LAK-3 16S ribosomal RNA gene, complete sequence
Length=1273

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```

Query 1      AGTGTCGCTCCGTCAGGCTTTTCGC  24
             |||
Sbjct 300    AGTGTCGCTCCGTCAGGCTTTTCGC  277

```

>gb|AY934610.1| *Borrelia turicatae* isolate TCB-2 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```

Query 1      AGTGTCGCTCCGTCAGGCTTTTCGC  24
             |||
Sbjct 300    AGTGTCGCTCCGTCAGGCTTTTCGC  277

```

>gb|AY934609.1| *Borrelia turicatae* isolate TCB-1 16S ribosomal RNA gene, partial sequence

Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>**gb|AY934608.1**| *Borrelia turicatae* isolate PE1-926 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>**gb|AY934607.1**| *Borrelia turicatae* isolate 99PE-1807 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>**gb|AY934606.1**| *Borrelia turicatae* isolate 95PE-570 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>**gb|AY934605.1**| *Borrelia turicatae* isolate RML 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>**gb|AY934598.1**| *Borrelia parkeri* isolate CA221 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>**gb|AY934597.1**| *Borrelia parkeri* isolate CA220 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24

Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>gb|AY934596.1| *Borrelia parkeri* isolate CA219 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>gb|AY934595.1| *Borrelia parkeri* isolate CA218 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>gb|AY934594.1| *Borrelia parkeri* isolate CA216 16S ribosomal RNA gene, partial sequence
Length=1272

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 300 AGTGTTCGCTCCGTCAGGCTTTTCGC 277

>gb|AY253149.1| *Borrelia* sp. MK-N61 16S ribosomal RNA gene, partial sequence
Length=626

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 319 AGTGTTCGCTCCGTCAGGCTTTTCGC 296

>gb|DQ393306.1| *Borrelia valaisiana* strain M7 16S ribosomal RNA (rrs) gene, partial sequence
Length=522

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346

>gb|DQ393305.1| *Borrelia valaisiana* strain Am501 16S ribosomal RNA (rrs) gene, partial sequence
Length=522

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346

>gb|DQ393304.1| *Borrelia californiensis* strain CA443 16S ribosomal RNA (rrs) gene, partial sequence
Length=522

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346
```

>**gb|DQ393303.1** | *Borrelia californiensis* strain CA404 16S ribosomal RNA (rrs) gene, partial sequence
 Length=522

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346
```

>**gb|DQ393302.1** | *Borrelia andersonii* strain 19952 16S ribosomal RNA (rrs) gene, partial sequence
 Length=522

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346
```

>**gb|DQ393301.1** | *Borrelia andersonii* strain 21133 16S ribosomal RNA (rrs) gene, partial sequence
 Length=522

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346
```

>**gb|DQ393300.1** | *Borrelia andersonii* strain 21123 16S ribosomal RNA (rrs) gene, partial sequence
 Length=522

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346
```

>**gb|DQ393299.1** | *Borrelia burgdorferi* strain 5LM218 16S ribosomal RNA (rrs) gene, partial sequence
 Length=522

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346
```

>**gb|DQ393298.1** | *Borrelia burgdorferi* strain Z51094 16S ribosomal RNA (rrs) gene, partial sequence
 Length=522

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346
```

>**gb|DQ393297.1**| *Borrelia burgdorferi* strain Sh-2-82 16S ribosomal RNA (rrs) gene, partial sequence
Length=522

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 369 AGTGTTCGCTCCGTCAGGCTTTTCGC 346

>**gb|AY083501.1**| *Borrelia burgdorferi* isolate St4 16S ribosomal RNA gene, partial sequence
Length=548

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 377 AGTGTTCGCTCCGTCAGGCTTTTCGC 354

>**gb|AY083500.1**| *Borrelia burgdorferi* isolate Na34 16S ribosomal RNA gene, partial sequence
Length=554

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 383 AGTGTTCGCTCCGTCAGGCTTTTCGC 360

>**gb|AY083499.1**| *Borrelia burgdorferi* isolate To89 16S ribosomal RNA gene, partial sequence
Length=500

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 329 AGTGTTCGCTCCGTCAGGCTTTTCGC 306

>**gb|AY083498.1**| *Borrelia burgdorferi* isolate To16 16S ribosomal RNA gene, partial sequence
Length=557

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 386 AGTGTTCGCTCCGTCAGGCTTTTCGC 363

>**gb|AY083497.1**| *Borrelia burgdorferi* isolate To106 16S ribosomal RNA gene, partial sequence
Length=557

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

Query 1 AGTGTTCGCTCCGTCAGGCTTTTCGC 24
|||
Sbjct 385 AGTGTTCGCTCCGTCAGGCTTTTCGC 362

>**gb|AY083496.1**| *Borrelia burgdorferi* isolate Sa5 16S ribosomal RNA gene, partial sequence
Length=558

Score = 48.1 bits (24), Expect = 4e-04

Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 386 AGTGTTCGCTCCGTCAGGCTTTTCGC 363
```

>gb|AY083495.1| *Borrelia burgdorferi* isolate Osk3 16S ribosomal RNA gene, partial sequence
Length=557

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 385 AGTGTTCGCTCCGTCAGGCTTTTCGC 362
```

>gb|AY083494.1| *Borrelia burgdorferi* isolate Osk2 16S ribosomal RNA gene, partial sequence
Length=557

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 386 AGTGTTCGCTCCGTCAGGCTTTTCGC 363
```

>gb|AY083493.1| *Borrelia burgdorferi* isolate Os2 16S ribosomal RNA gene, partial sequence
Length=557

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 385 AGTGTTCGCTCCGTCAGGCTTTTCGC 362
```

>gb|DQ346813.1| *Borrelia recurrentis* isolate A2 16S ribosomal RNA gene, complete sequence
Length=1525

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 387 AGTGTTCGCTCCGTCAGGCTTTTCGC 364
```

>gb|DQ057990.1| *Borrelia crocidurae* 16S ribosomal RNA gene, partial sequence
Length=1463

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 379 AGTGTTCGCTCCGTCAGGCTTTTCGC 356
```

>gb|DQ057989.1| *Borrelia crocidurae* 16S ribosomal RNA gene, partial sequence
Length=1430

Score = 48.1 bits (24), Expect = 4e-04
Identities = 24/24 (100%), Gaps = 0/24 (0%)
Strand=Plus/Minus

```
Query 1   AGTGTTCGCTCCGTCAGGCTTTTCGC 24
          |||
Sbjct 380 AGTGTTCGCTCCGTCAGGCTTTTCGC 357
```

>gb|DQ057988.1| *Borrelia hispanica* 16S ribosomal RNA gene, partial sequence

Length=1465

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1      AGTGTTCGCTCCGTCAGGCTTTTCGC 24
           |||
Sbjct 380    AGTGTTCGCTCCGTCAGGCTTTTCGC 357
```

>gb|AY884354.1| Borrelia sp. W97F51 16S ribosomal RNA gene, partial sequence
 Length=567

Score = 48.1 bits (24), Expect = 4e-04
 Identities = 24/24 (100%), Gaps = 0/24 (0%)
 Strand=Plus/Minus

```
Query 1      AGTGTTCGCTCCGTCAGGCTTTTCGC 24
           |||
Sbjct 324    AGTGTTCGCTCCGTCAGGCTTTTCGC 301
```

Database: All GenBank+EMBL+DDBJ+PDB sequences (but no EST, STS, GSS, environmental samples or phase 0, 1 or 2 HTGS sequences)

Posted date: Dec 19, 2007 5:48 PM

Number of letters in database: 935,294,007

Number of sequences in database: 6,196,379

Lambda K H
 1.37 0.711 1.31

Gapped

Lambda K H
 1.37 0.711 1.31

Matrix: blastn matrix:1 -3

Gap Penalties: Existence: 5, Extension: 2

Number of Sequences: 6196379

Number of Hits to DB: 8203158

Number of extensions: 3116119

Number of successful extensions: 29837

Number of sequences better than 1000: 7325

Number of HSP's better than 1000 without gapping: 0

Number of HSP's gapped: 29837

Number of HSP's successfully gapped: 7394

Length of query: 24

Length of database: 22410130487

Length adjustment: 19

Effective length of query: 5

Effective length of database: 22292399286

Effective search space: 111461996430

Effective search space used: 111461996430

A: 0

X1: 11 (21.8 bits)

X2: 15 (29.7 bits)

X3: 25 (49.6 bits)

S1: 11 (22.3 bits)

S2: 14 (28.2 bits)