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**Newport Laboratories Inc.**

# 1524 Prairie Dr.

**Worthington, MN 56187**

**1-800-220-2522**

|  |  |
| --- | --- |
| **Isolate case number:** | 11-0107-1 11-0108-3 12-2559-1 12-2560-1 12-2561-1 12-2562-1 12-2563-1 |
| **Client:** | Various |
| **Clinic:** | Edmonds Veterinary Service |
| **Requesting Veterinarian** | Dr. Patrick L. Edmonds |
| **Completion date:** | 07/31/12 |

Angelos JA, Ball LM. Relatedness of cytotoxins from geographically diverse isolates of *Moraxella bovis.* Vet Microbiol. 2007 Oct 6;124(3-4):382-6.

Angelos JA, Ball LM, Hess JF. Identification and Characterization of complete RTX operons in *Moraxella bovoculi* and *Moraxella ovis.* Vet Microbiol. 2007 Nov 15;125(1-2):73-9.

Phylogenetic Tree – 16s

Nucleotide Substitution per 100 residues

0

1.6

16s 11-0106-3

16s 11-2104-3

16s 11-0108-1

16s 12-2561-1

16s Moraxella bovoculi reference

16s 11-0109-1 020112

16s 11-0106-1

16s 12-2559-1

16s 11-2104-1

16s 11-0108-2

16s 11-0108-4

16s 12-2562-1

16s 12-0086-1

16s 11-0109-2

16s 11-0105-2

16s 11-0107-1

16s 11-0108-3

16s 11-2104-2

16s 12-2560-1

16s 12-2563-1

16s Moraxella bovis reference

Sequence Distances – 16s



Phylogenetic Tree – RTX

Nucleotide Substitution per 100 residues

0

14.5

2

4

6

8

10

12

14

BVC RTX 12-2562-1

Moraxella bovoculi reference

BVC RTX 11-0109-2

BVC RTX 12-0086-1

BVC RTX 11-0108-4

BVC RTX 11-0109-1

BVC RTX 11-0108-2

BVC RTX 11-0106-1

BVC RTX 11-0106-3

BVC RTX 11-0108-1

BVC RTX 11-2104-1

BVC RTX 11-2104-3

BVC RTX 12-2561-1

BVC RTX 11-0105-2

BVS RTX 11-0107-1

BVS RTX 11-0108-3

BVS RTX 11-2104-2

BVS RTX 12-2560-1

BVS RTX 12-2563-1

Moraxella bovis reference

**\*12-2559-1 is non-hemolytic\***

Sequence Distances – RTX



Case / Client Information

