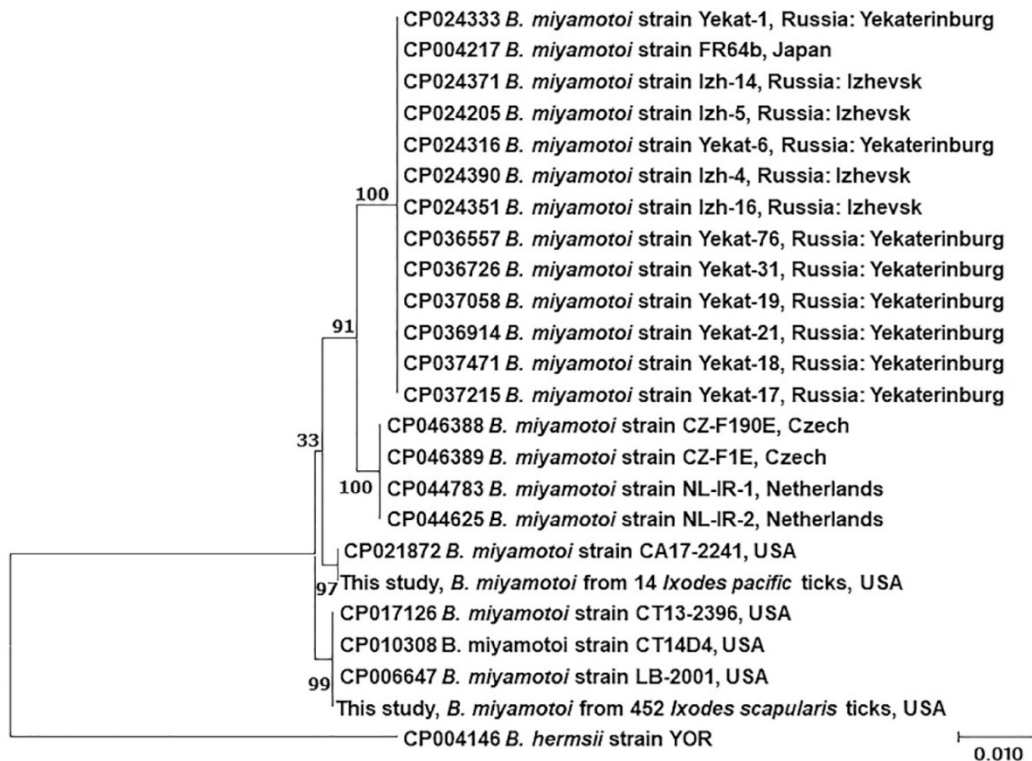


Borrelia miyamotoi in Human-Biting Ticks, United States, 2013–2019

Appendix

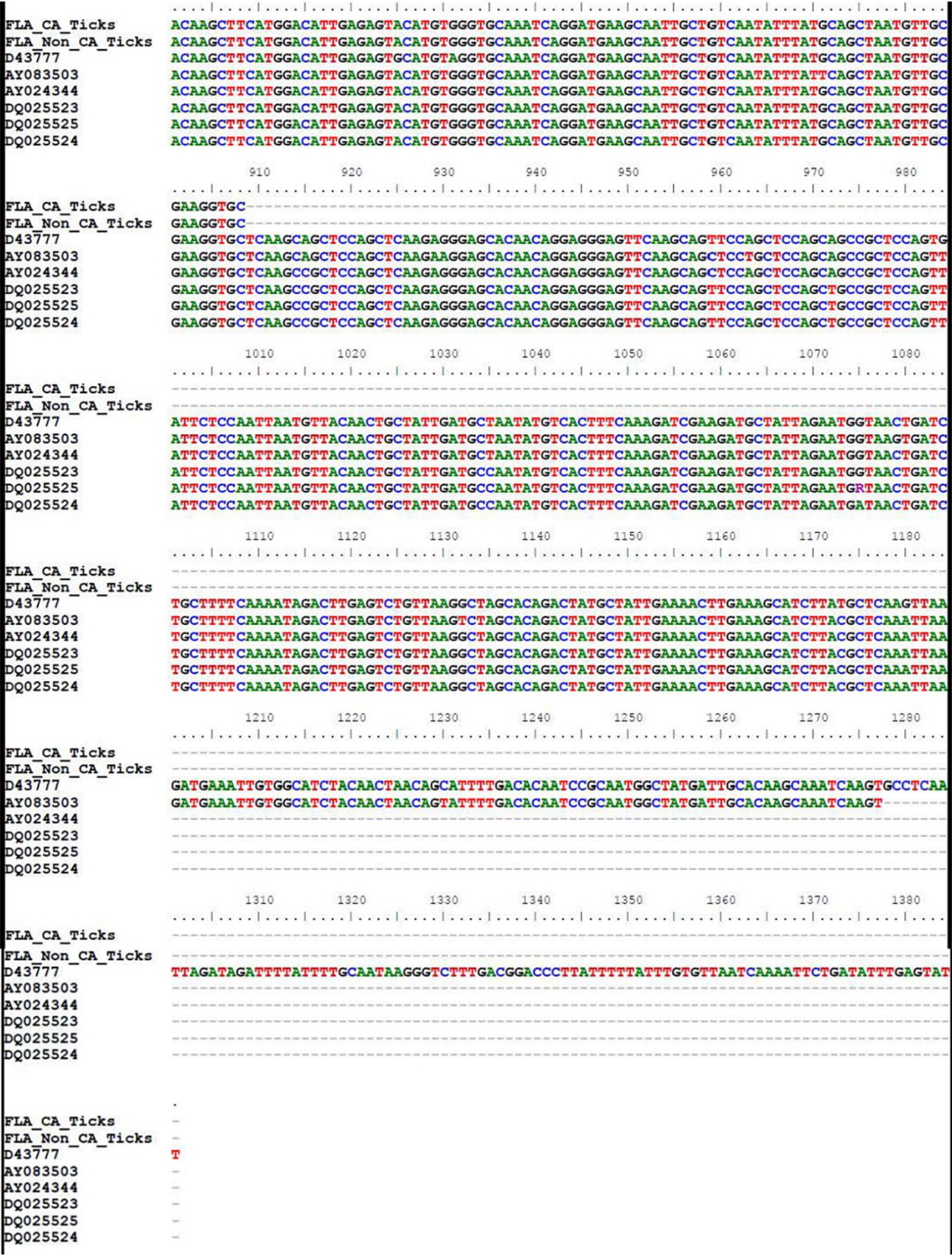


Appendix Figure 1. Phylogenetic tree of *Borrelia miyamotoi* 16S rDNA (16S), flagellin (*fla*), and glycerophosphodiester phosphodiesterase (*glpQ*) genes constructed by maximum likelihood method of MEGA software version 10 (<http://www.megasoftware.net>). Of 594 *B. miyamotoi*-positive *Ixodes scapularis* ticks, we successfully sequenced a 1,545bp long fragment of 3 concatenated genes from 452 ticks. We selected Hasegawa-Kishino-Yano with invariable site as the best model based on Bayesian information criterion scores. Numbers on the branches represent bootstrap support with 500 bootstrap replicates. Scale bar represents nucleotide substitutions per site.

```

          10      20      30      40      50      60      70      80
FLA_CA_Ticks
FLA_Non_CA_Ticks
D43777
AY083503
AY024344
DQ025523
DQ025525
DQ025524
          110     120     130     140     150     160     170     180
FLA_CA_Ticks
FLA_Non_CA_Ticks
D43777
AY083503
AY024344
DQ025523
DQ025525
DQ025524
          210     220     230     240     250     260     270     280
FLA_CA_Ticks
FLA_Non_CA_Ticks
D43777
AY083503
AY024344
DQ025523
DQ025525
DQ025524
          310     320     330     340     350     360     370     380
FLA_CA_Ticks
FLA_Non_CA_Ticks
D43777
AY083503
AY024344
DQ025523
DQ025525
DQ025524
          410     420     430     440     450     460     470     480
FLA_CA_Ticks
FLA_Non_CA_Ticks
D43777
AY083503
AY024344
DQ025523
DQ025525
DQ025524
          510     520     530     540     550     560     570     580
FLA_CA_Ticks
FLA_Non_CA_Ticks
D43777
AY083503
AY024344
DQ025523
DQ025525
DQ025524
          610     620     630     640     650     660     670     680
FLA_CA_Ticks
FLA_Non_CA_Ticks
D43777
AY083503
AY024344
DQ025523
DQ025525
DQ025524
          710     720     730     740     750     760     770     780
FLA_CA_Ticks
FLA_Non_CA_Ticks
D43777
AY083503
AY024344
DQ025523
DQ025525
DQ025524

```



Appendix Figure 2. Alignment of *Borrelia miyamotoi* fla gene segment.