Figure S1 Definition of sequence subsets of different evolutionary divergence in Puumala hantavirus following Duchêne et al. 2015. Sequences in a ML topology connecting to basal branches (black) were removed to create a sequence subset of reduced evolutionary age (1) relative to the full data set. Subsets of further reduced evolutionary levels (2 and 3) were created by removing additional basal sequences where level 3 represents the least diverged subset.

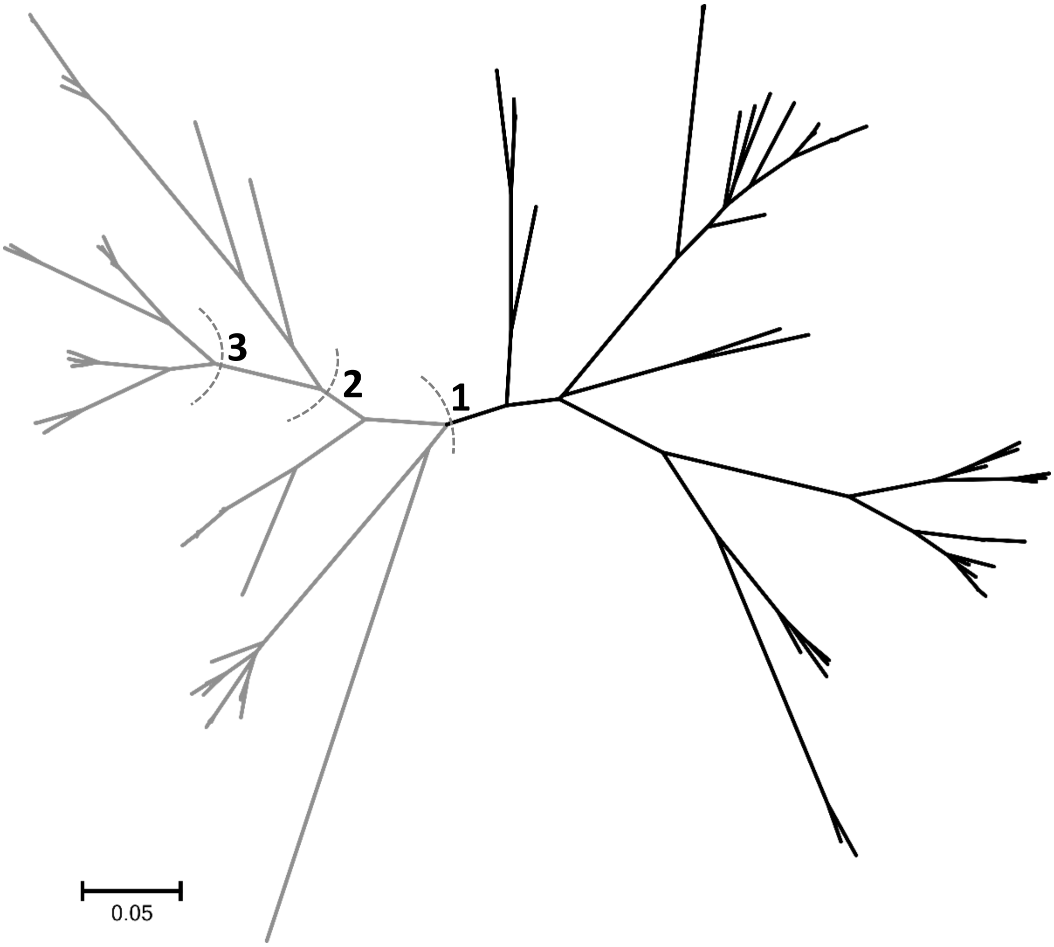


Figure S2 Geographic distance vs. genetic divergence based on whole genome sequences of Puumala hantavirus (PUUV). Genetic distance is calculated as p-distance (A), under the TrN+I+G model of sequence evolution (B) and as sum of branch lengths in a phylogenetic tree (C). Lines indicate fitted saturation growth models with residual standard errors indicated.

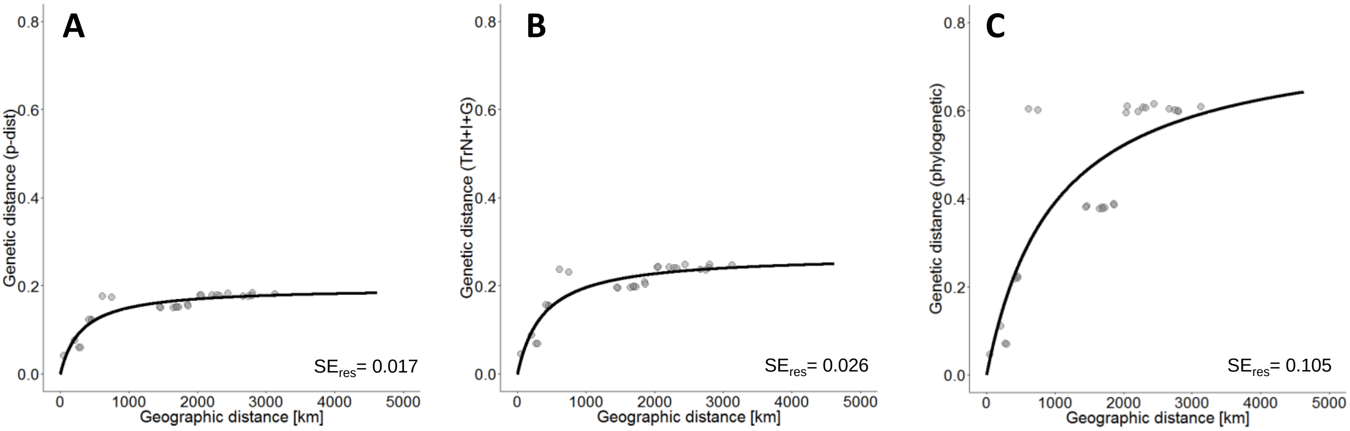


Figure S3 Relationship between geographic distance and genetic divergence based on deduced partial amino acid sequences of the Puumala (PUUV) and Tula (TULV) hantavirus nucleocapsid proteins. p-distances for TULV (A) and PUUV (C) and sum of branch lengths from a phylogenetic tree estimated on the amino acid sequences are shown for TULV (B) and PUUV (D). Lines indicate fitted Saturation Growth Rate models with goodness of fit indicated as residual standard errors.

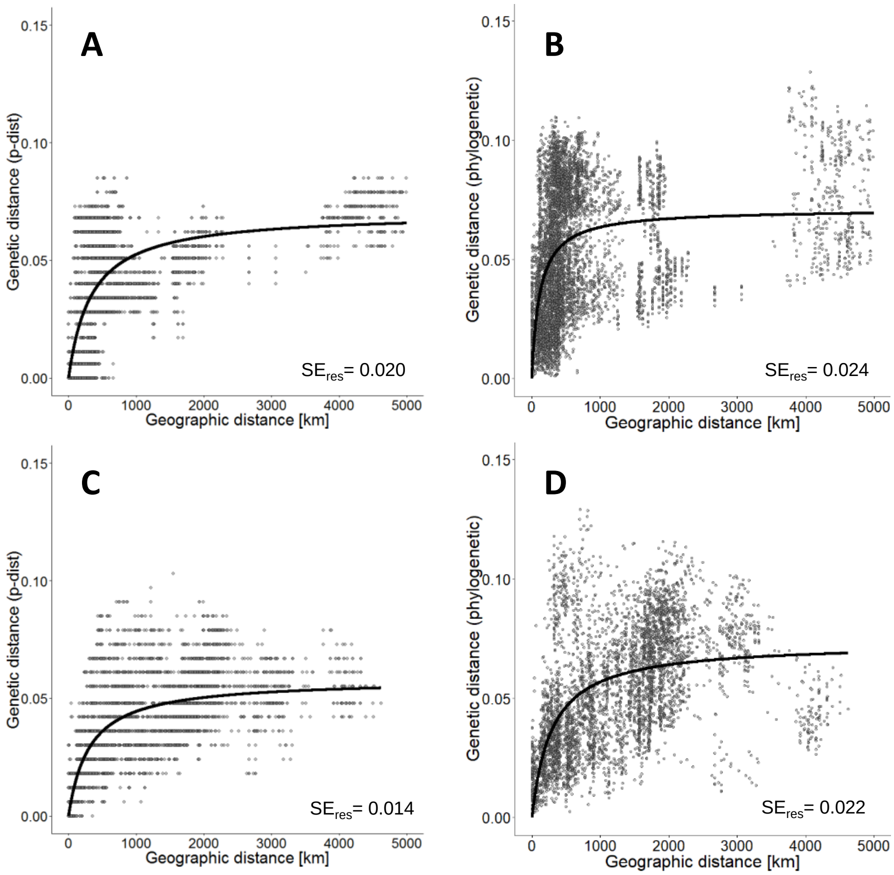


Figure S4 Pairwise geographic distance plotted against genetic divergence estimated for 1st + 2nd (A and C) and 3rd codon position separately (B and D). Divergence was modelled using the TrN+I+G model of nucleotide substitution for PUUV (A and B) and TULV (C and D) partial S-segment sequence.

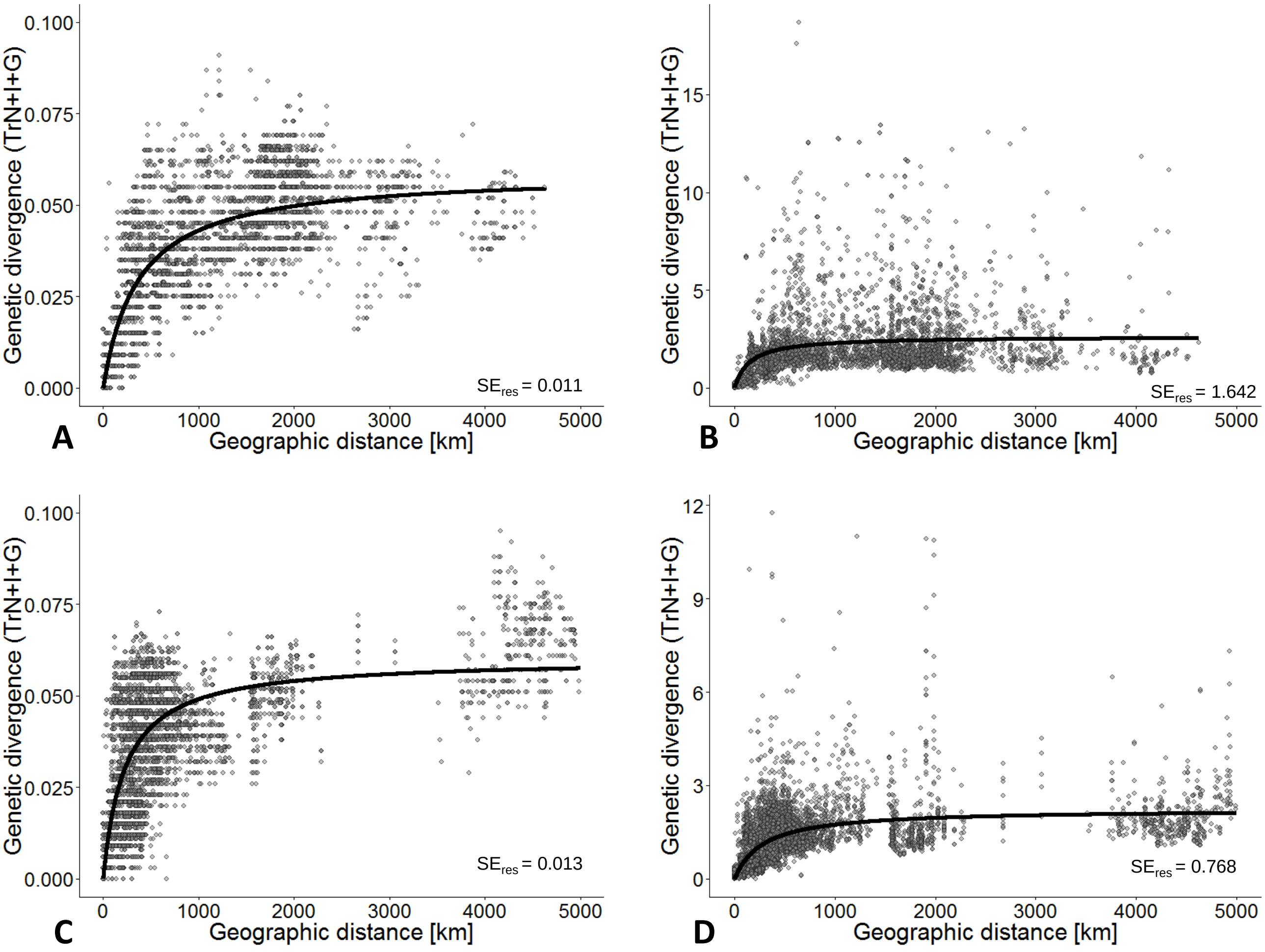


Figure S5 Correlation between pairwise genetic divergence inferred with the TrN+I+G model of sequence evolution and transition to transversion ratios (Ti/Tv) for PUUV (A) and TULV (B) partial S-segment sequences. An exponential model was fitted to data points indicated by a solid line.

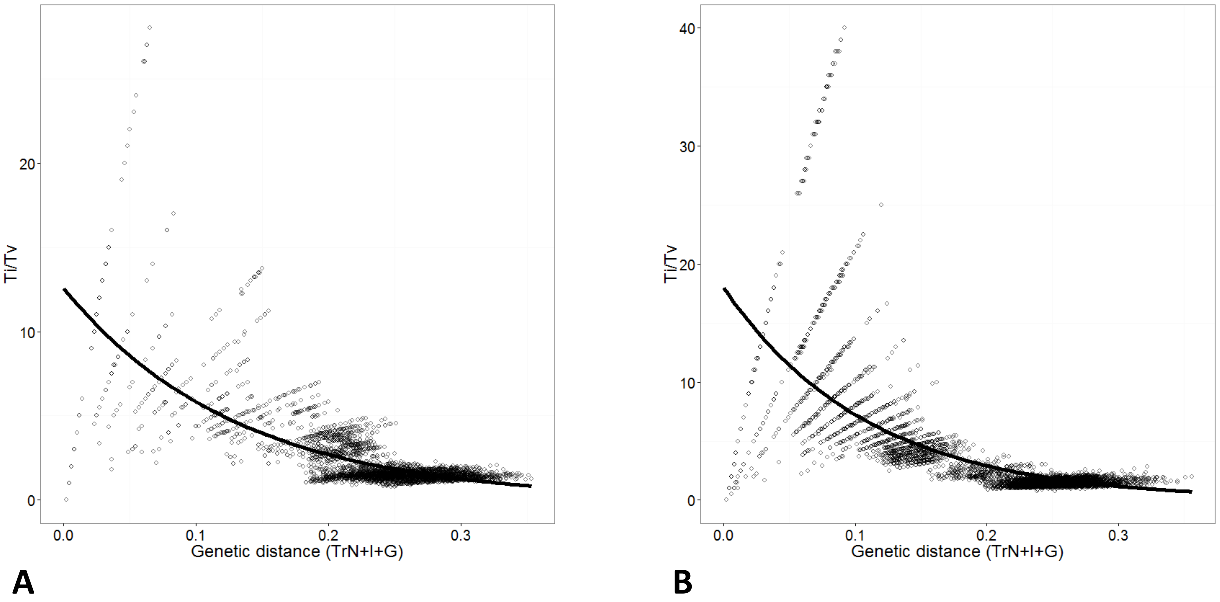


Figure S6 TMRCA estimated using BEAST for PUUV (A) and TULV (B) based on partial S-segment sequences. Node ages are indicated in years for major nodes. Bars indicate 95% highest posterior density (HPD) intervals.

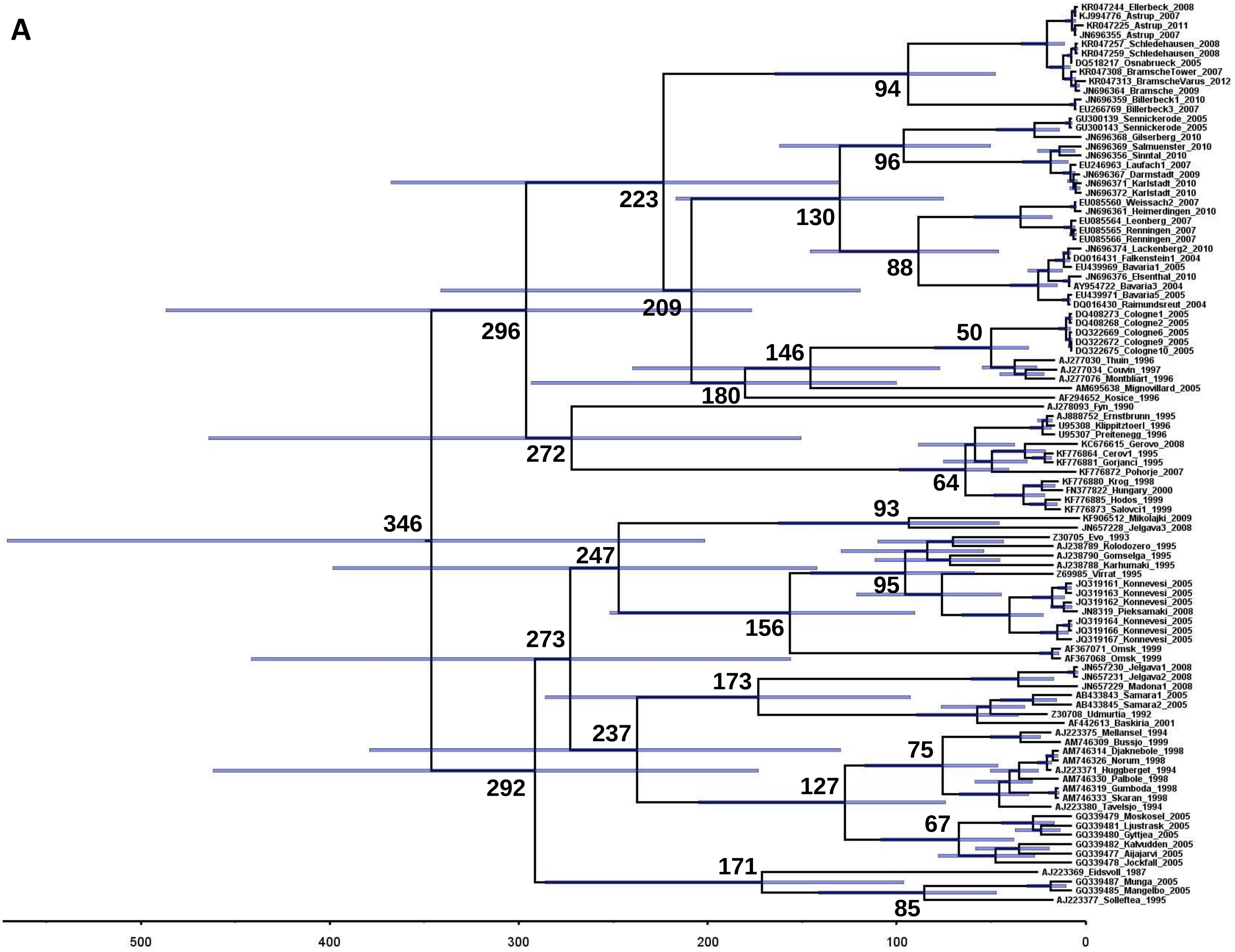
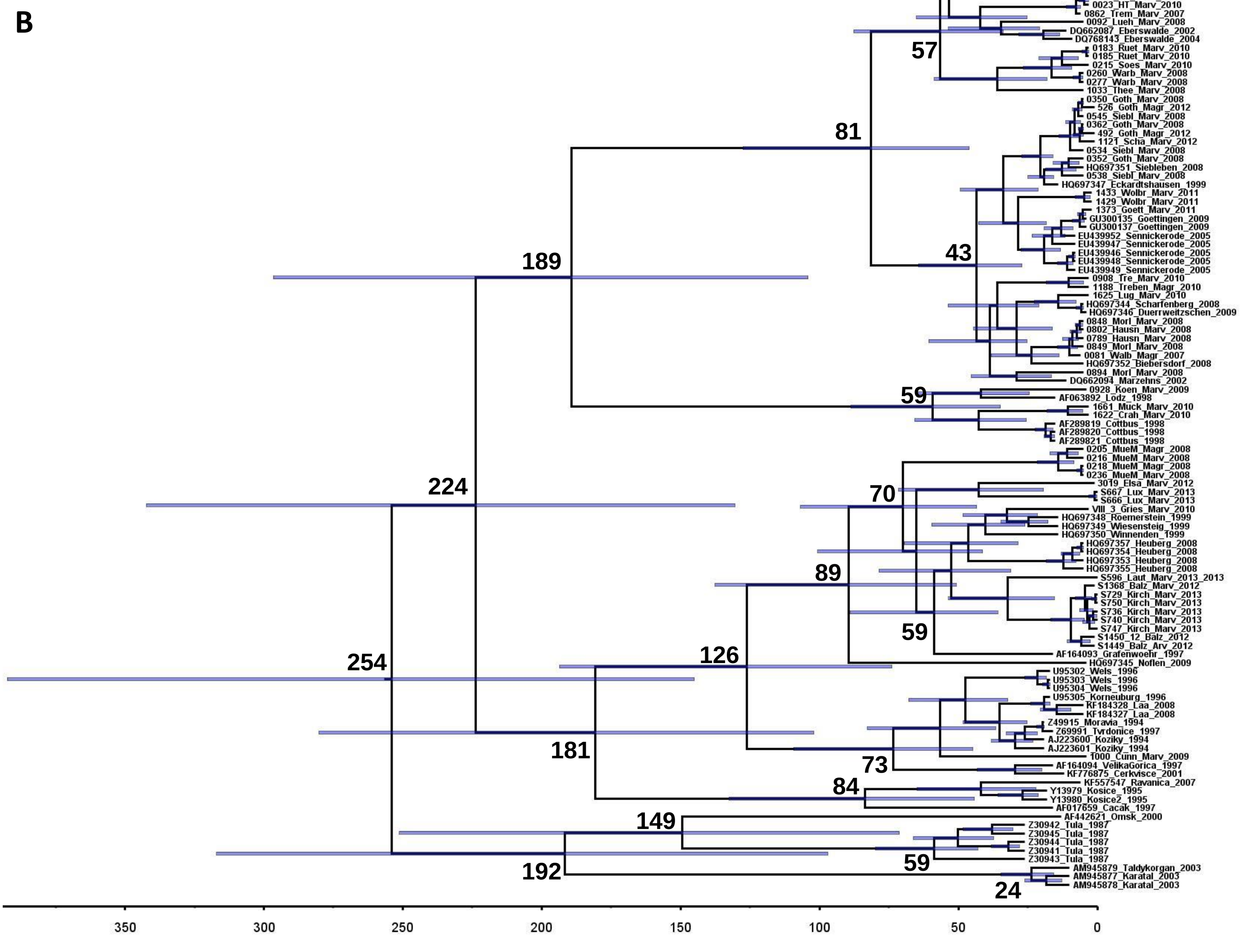


Figure S6


B
2324_HT_Marv_2009
0029_HT_Marv_2010
2375_HT_Marv_2009
1457_Frae_Marv_2007
1477_GroSch_Marv_2009
34_Gato_Marv_2011
1045_WG_Marv_2008
0639_WG_Marv_2008
0772_Schrev_Marv_2013
0784_Schrev_Magr_2013
0018_HT_Marv_2010
0023_HT_Marv_2010
0862_Trem_Marv_2007
0092_Lueh_Marv_2008
DQ662087_Eberswalde_2002
DQ768143_Eberswalde_2004
0183_Ruet_Marv_2010
0185_Ruet_Marv_2010
0215_Soes_Marv_2010
0260_Warb_Marv_2008
0277_Warb_Marv_2008
1033_Thee_Marv_2008
0350_Goth_Marv_2008
526_Goth_Magr_2012
0545_Siebl_Marv_2008
0362_Goth_Marv_2008
492_Goth_Magr_2012
1121_Scha_Marv_2012
0534_Siebl_Marv_2008
0352_Goth_Marv_2008
HQ697351_Siebleben_2008
0538_Siebl_Marv_2008
HQ697347_Eckardtshausen_1999
1433_Wolbr_Marv_2011
1429_Wolbr_Marv_2011
1373_Goett_Marv_2011
GU300135_Goettingen_2009
GU300137_Goettingen_2009
EU439952_Sennickerode_2005
EU439947_Sennickerode_2005
EU439946_Sennickerode_2005
EU439948_Sennickerode_2005
EU439949_Sennickerode_2005
0908_Tre_Marv_2010
1188_Treben_Magr_2010
1625_Lug_Marv_2010
HQ697344_Scharfenberg_2008
HQ697346_Duerrweitzschen_2009
0848_Morl_Marv_2008
0802_Hausn_Marv_2008
0789_Hausn_Marv_2008
0849_Morl_Marv_2008
0081_Walb_Magr_2007
HQ697352_Biebersdorf_2008
0894_Morl_Marv_2008
DQ662094_Marzehns_2002
0928_Koen_Marv_2009
AF063892_Lodz_1998
1661_Muck_Marv_2010
1622_Crah_Marv_2010
AF289819_Cottbus_1998
AF289820_Cottbus_1998
AF289821_Cottbus_1998
0205_MueM_Magr_2008
0216_MueM_Marv_2008
0218_MueM_Magr_2008
0236_MueM_Marv_2008
3019_Elsa_Marv_2012
S667_Lux_Marv_2013
S666_Lux_Marv_2013
VIII_3_Gries_Marv_2010
HQ697348_Roemerstein_1999
HQ697349_Wiesensteig_1999
HQ697350_Winnenden_1999
HQ697357_Heuberg_2008
HQ697354_Heuberg_2008
HQ697353_Heuberg_2008
HQ697355_Heuberg_2008
S596_Laut_Marv_2013_2013
S1368_Balz_Marv_2012
S729_Kirch_Marv_2013
S750_Kirch_Marv_2013
S736_Kirch_Marv_2013
S740_Kirch_Marv_2013
S747_Kirch_Marv_2013
S1450_12_Balz_2012
S1449_Balz_Arv_2012
AF164093_Grafenwoehr_1997
HQ697345_Noflen_2009
U95302_Wels_1996
U95303_Wels_1996
U95304_Wels_1996
U95305_Korneuburg_1996
KF184328_Laa_2008
KF184327_Laa_2008
Z49915_Moravia_1994
Z69991_Tvrdonice_1997
AJ223600_Koziky_1994
AJ223601_Koziky_1994
1000_Cunn_Marv_2009
AF164094_VelikaGorica_1997
KF776875_Cerkvisce_2001
KF557547_Ravanica_2007
Y13979_Kosice_1995
Y13980_Kosice2_1995
AF017659_Cacak_1997
AF442621_Omsk_2000
Z30942_Tula_1987
Z30945_Tula_1987
Z30944_Tula_1987
Z30941_Tula_1987
Z30943_Tula_1987
AM945879_Taldykorgan_2003
AM945877_Karatal_2003
AM945878_Karatal_2003
57
81
43
189
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254
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181
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100
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