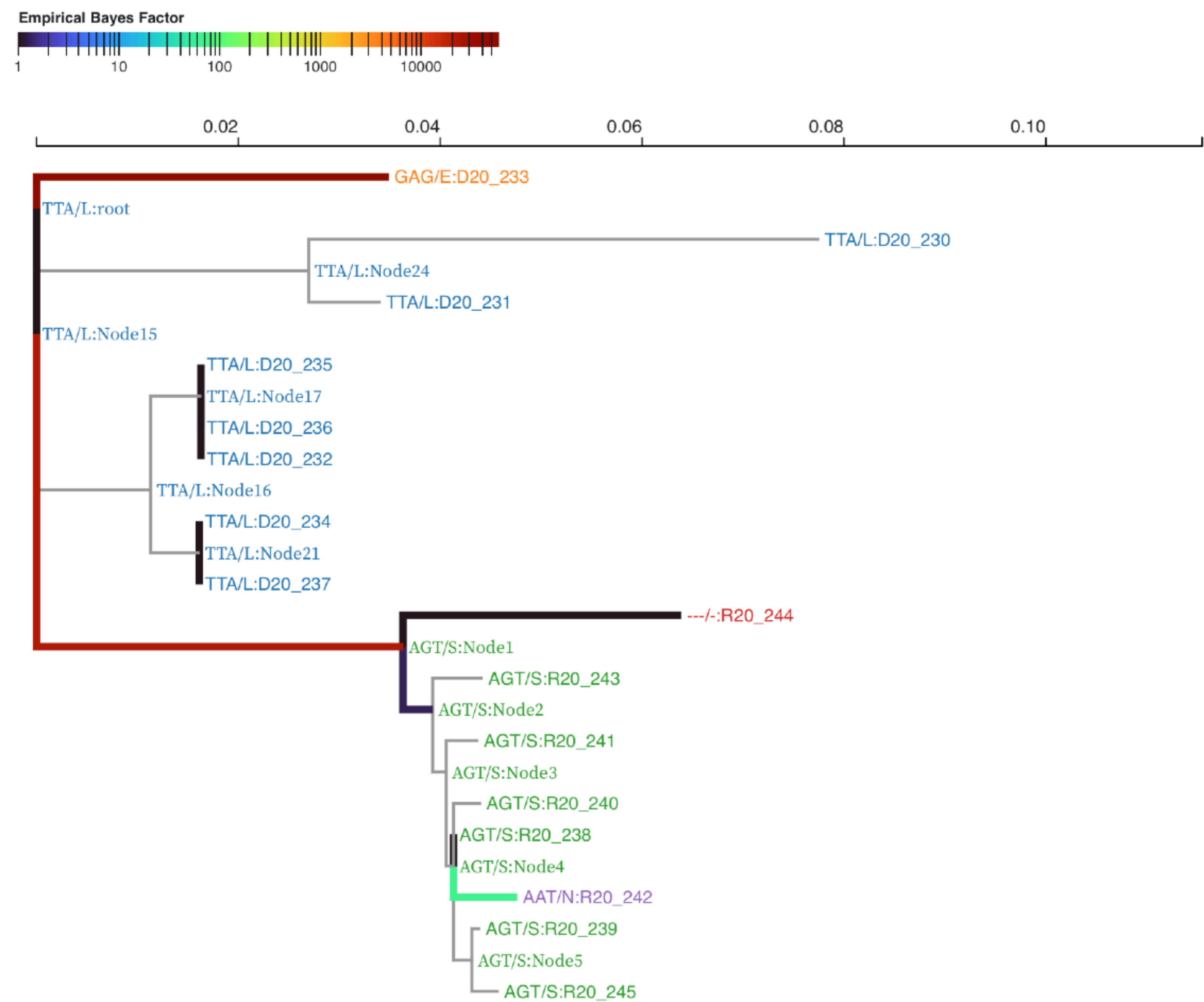


Codon 270



# BUSTED analysis summary

- **West Nile Virus NS3 protein**

- No statistical support for selection; ML point estimate allocates a small proportion of sites (~1%) to the selected group ( $dN/dS \sim 2$ )
- The rest of the gene is very strongly conserved ( $dN/dS = 0.004$ )

- **HIV-1 transmission pair**

- Very strong evidence of strong episodic diversification ( $dN/dS \sim 100$ ) on a small proportion of sites (2%)
- The rest of the gene evolves with weak purifying selection ( $dN/dS = 0.6-0.7$ )

- **SARS-CoV-2 spike**

- Evidence of episodic diversification ( $dN/dS \sim 15$ ) on a small proportion of sites (~2%)
- Most of the rest of the gene evolves with purifying selection ( $dN/dS = 0.2$ )