



Figure S2. Ancestral sequence reconstruction (ASR) of Alphacoronavirus and Torovirus PDEs. A) ML tree of 10 Alphacoronavirus PDE sequences, collapsed into major clades, rooted with the *HsAKAP7* PDE domain sequence (AA 82-287) and sequence identity to *HsAKAP7* of reconstructed sequences at major nodes. B) ML tree of 18 Torovirus PDE sequences, collapsed into major clades, rooted with the *HsAKAP7* PDE domain sequence (AA 82-287) and sequence identity to *HsAKAP7* of reconstructed sequences at major nodes.