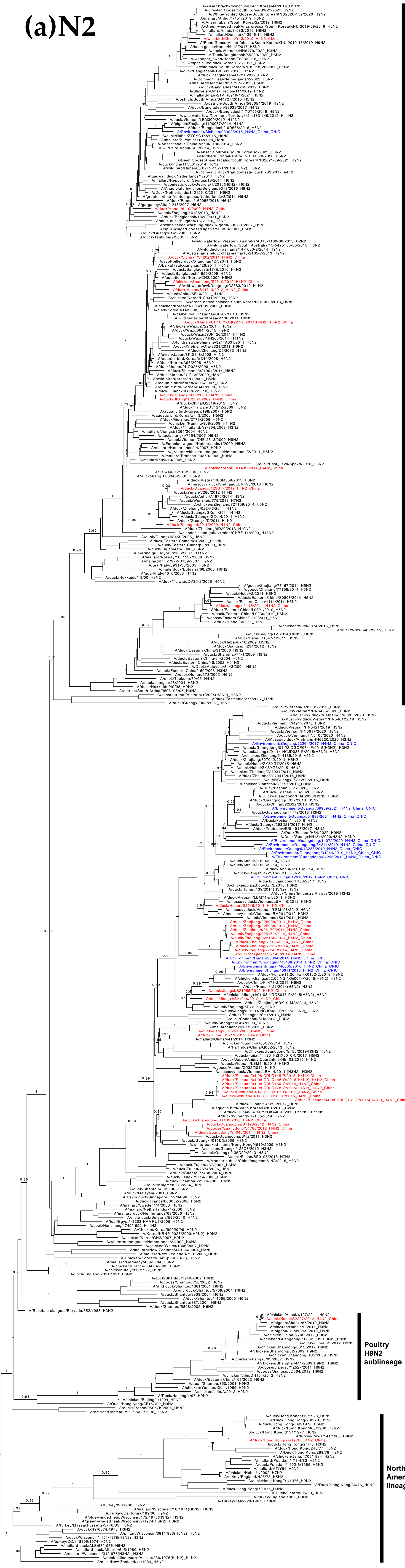


(a)N2



Eurasian-1
sublineage

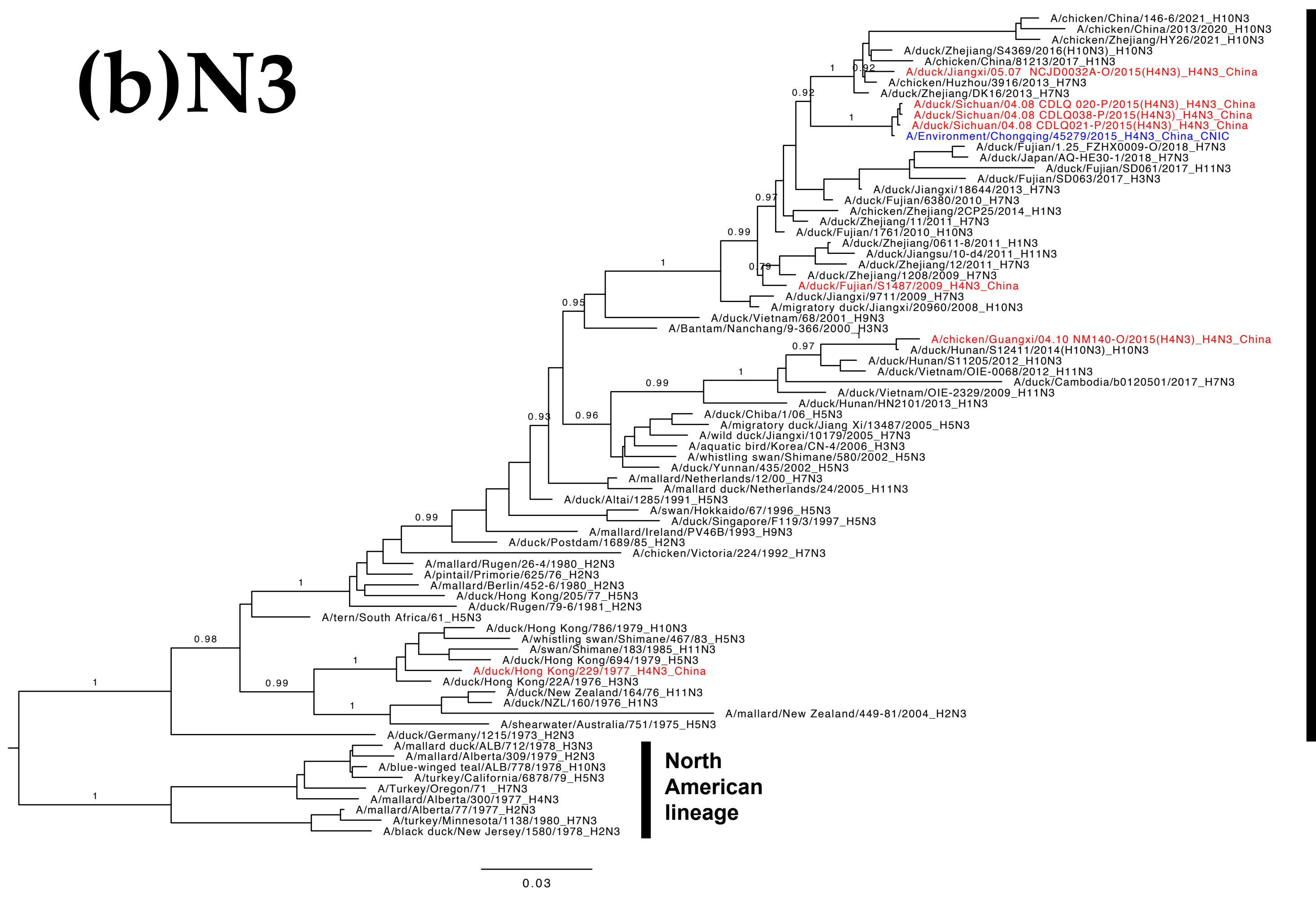
Eurasian
lineage

Eurasian-2
sublineage

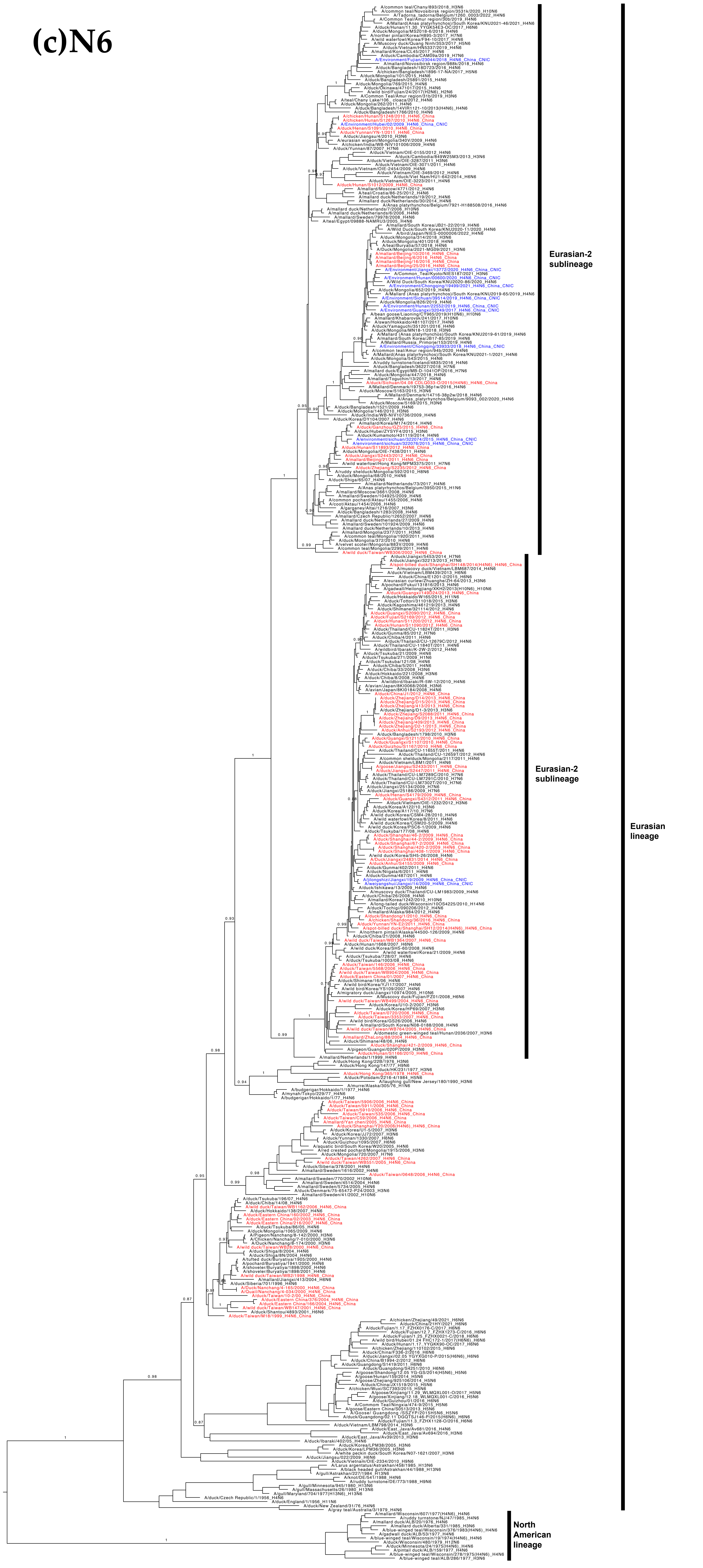
Poultry
H9N2
sublineage

North
American
lineage

(b)N3



(c)N6



(d)N8



Eurasian lineage

North American lineage

Figure S2. Phylogenetic tree of neuraminidase (NA) genes. (a) N2 gene (n=385); (b) N3 gene (n=77); (c) N6 gene (n=386); (d) N8 gene (n=213). H4 strains sequenced in this study are in steel blue. Other H4 AIVs in China are in red. Branch lengths are scaled according to the number of substitutions per site. Branch support values of selected nodes are shown. Lineages, sublineages and subgroups are labeled with vertical lines on the right.