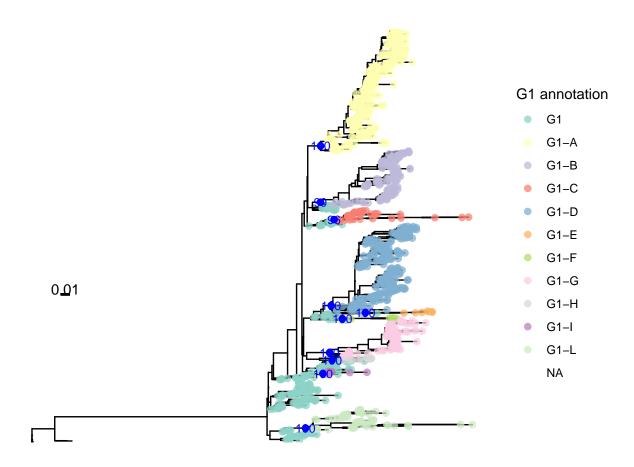
H9_G1_KOR_pairwise_nodedistance

Jiani Chen

9/9/2021

G1 clades defined from annotation files

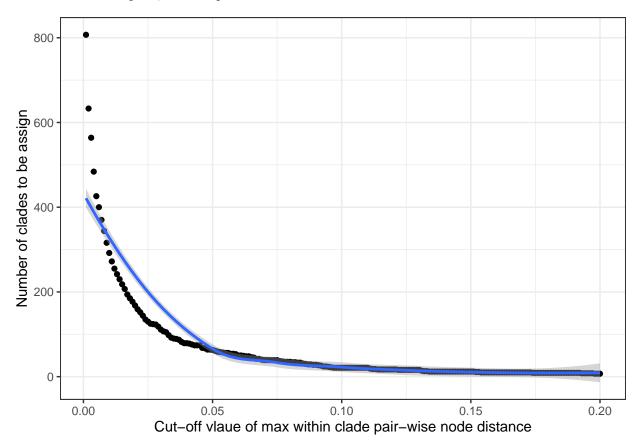


With the assigned clade, calulate the maximal pair-wise node distance within clade

```
## clade max.within.clade.pair.nodedist
## 1 G1-A 0.15301150
## 2 G1-B 0.13781677
## 3 G1-C 0.13020160
## 4 G1-D 0.19205041
## 5 G1-E 0.05739515
```

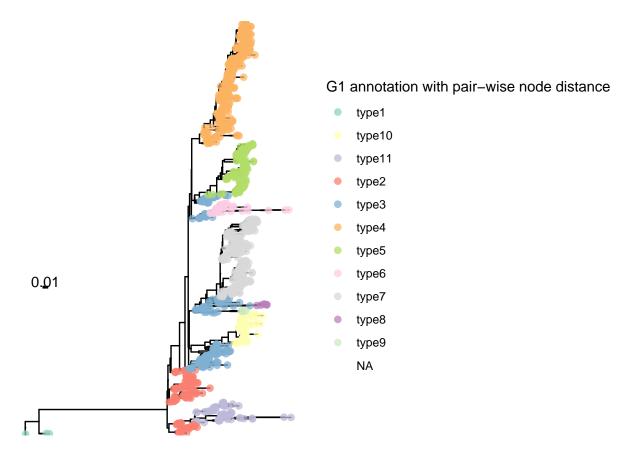
```
## 6 G1-F 0.04719568
## 7 G1-G 0.10645165
## 8 G1-H 0.02182253
## 9 G1-I 0.02052572
## 10 G1-L 0.13336139
```

You can also embed plots, for example:

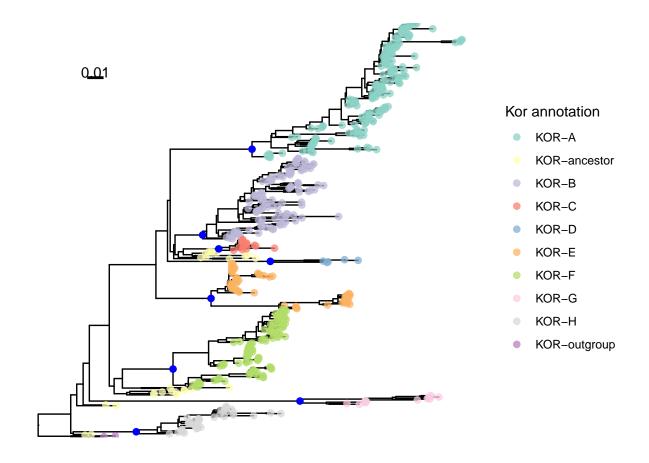


I re-assign the clade with maximal pair-wise node distance 0.16 within clade Similar resultes from the clades defined in annotation file

 ${
m G1-D}$ clade, small propotion of sequences was unable to classified with this approach (type 8, green)



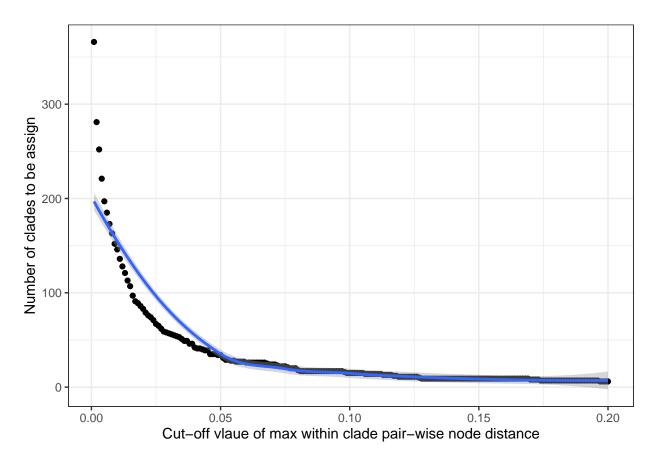
analysis for KOR clade # Kor clades defined from annotation files



With the assigned clade, calulate the maximal pair-wise node distance within clade

```
clade max.within.clade.pair.nodedist
## 1 KOR-A
                                  0.173678
## 2 KOR-B
                                  0.097446
## 3 KOR-C
                                  0.016257
## 4 KOR-D
                                  0.079447
## 5 KOR-E
                                  0.118378
## 6 KOR-F
                                  0.126374
## 7 KOR-G
                                  0.116707
## 8 KOR-H
                                  0.079360
```

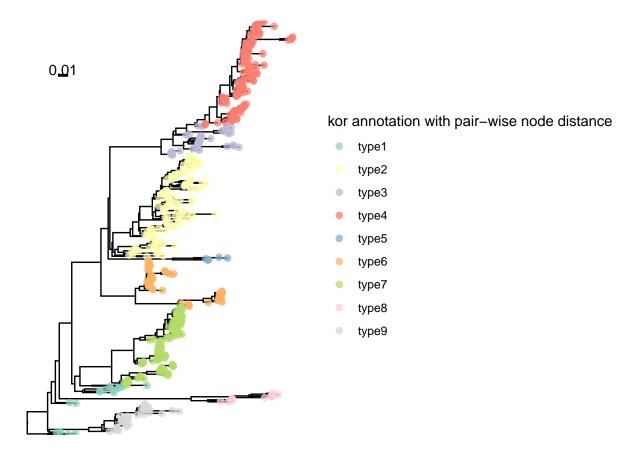
simulation with different maximal within clade pair-wise node distance



I re-assign the clade with maximal pair-wise node distance 0.16 within clade

Similar resultes from the clades defined in annotation files, only differences in KOR-A

KOR-A was divided into two propotion with pair-wise node distance criteria (type1 and type 3)



Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.