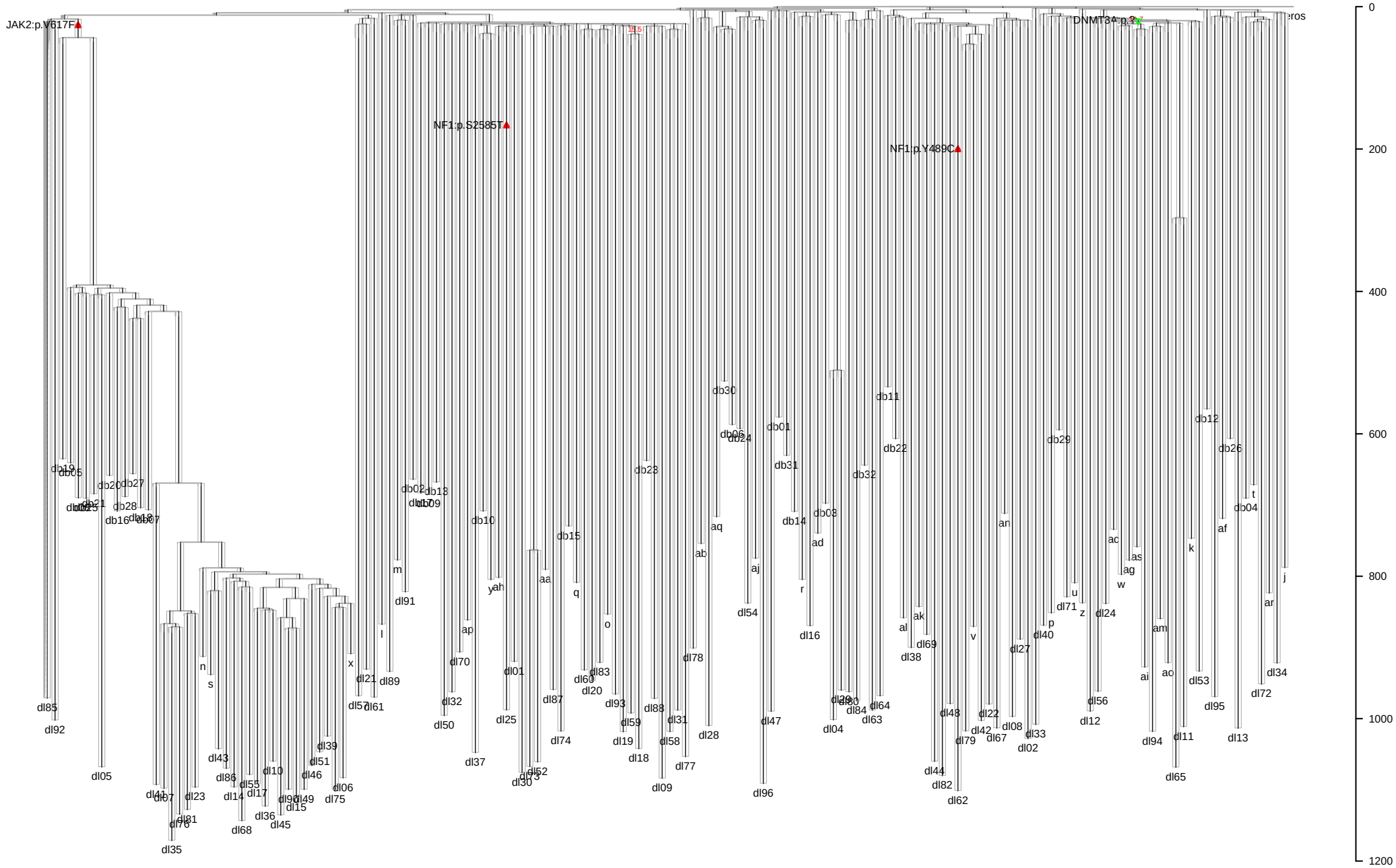
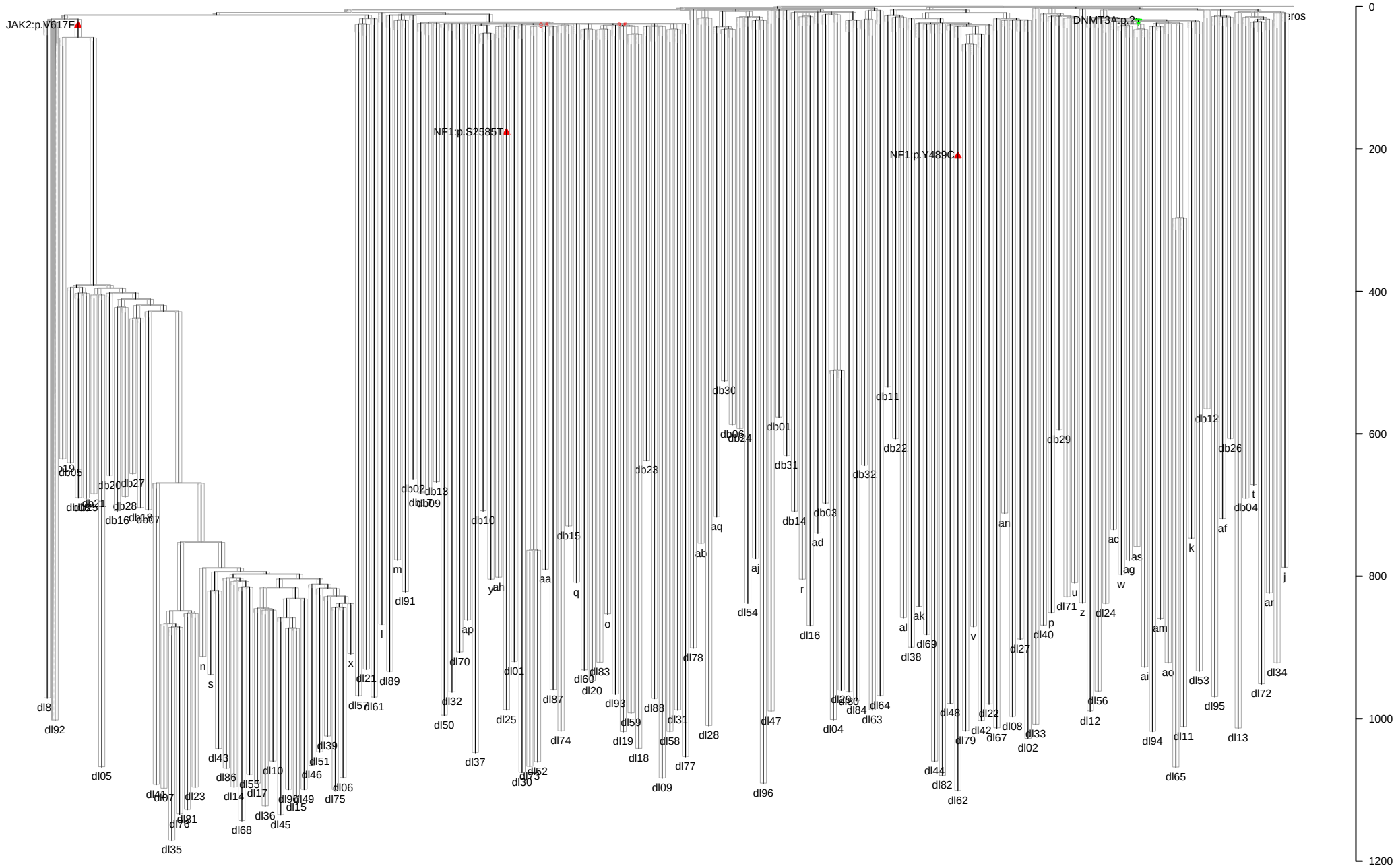
## Tree By Colony Quality Assessment

This file reports the VAF distribution of the variants assigned to each branch on a per colony basis. This allows one to 'walk through' the trees on a per colony basis to visualise both the branch placement and VAF of all the variants present in that single colony with respect to the rest of the tree. This is particularly helpful to ensure that variants belonging to a single colony are not found in non-ancestral branches whilst also allowing one to assess if other branches in the tree suffer from a lack of sensitivity for picking up specific variants. The report includes all colonies - including those that are dropped from the final tree and also some additional samples of interest. For colonies that are in the final tree it is expected that the VAFs will be clonal on branches that are ancestral to the colony of interest and zero for those that are not ancestral. Branches are highlighted if they show significant deviation from this expectation (VAF<0.35 and VAF>0.05; Binomial test on aggregate mutant read count and aggregate depth; blue $p<0.05$ and red $p<0.05$/number of branches). Branches where the depth is significantly lower than the depth of variants across the whole tree are annotated with the branch depth shown in red.

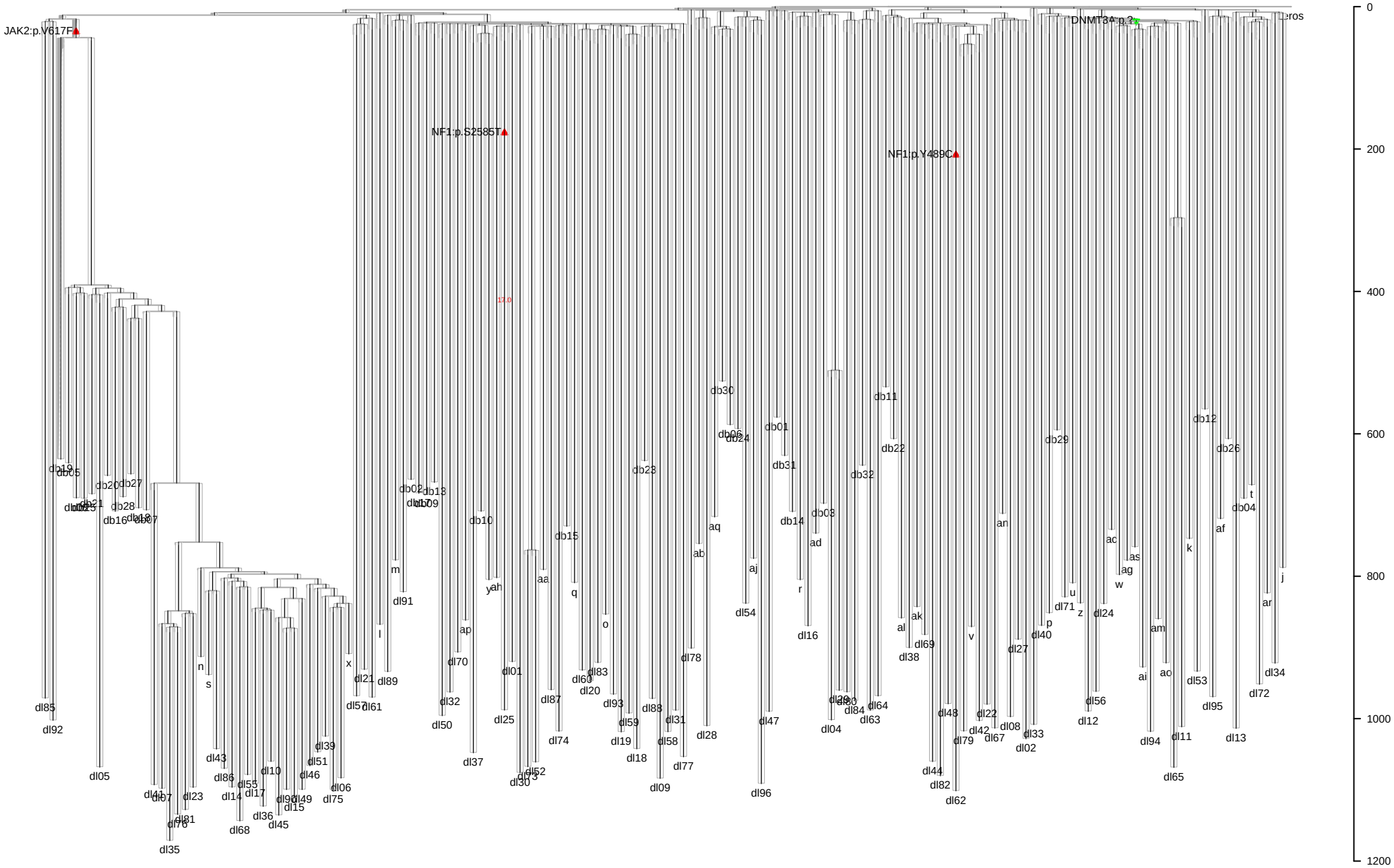
**PD5182: Annotated with VAF from dl85**
**Mean Depth=19.27**



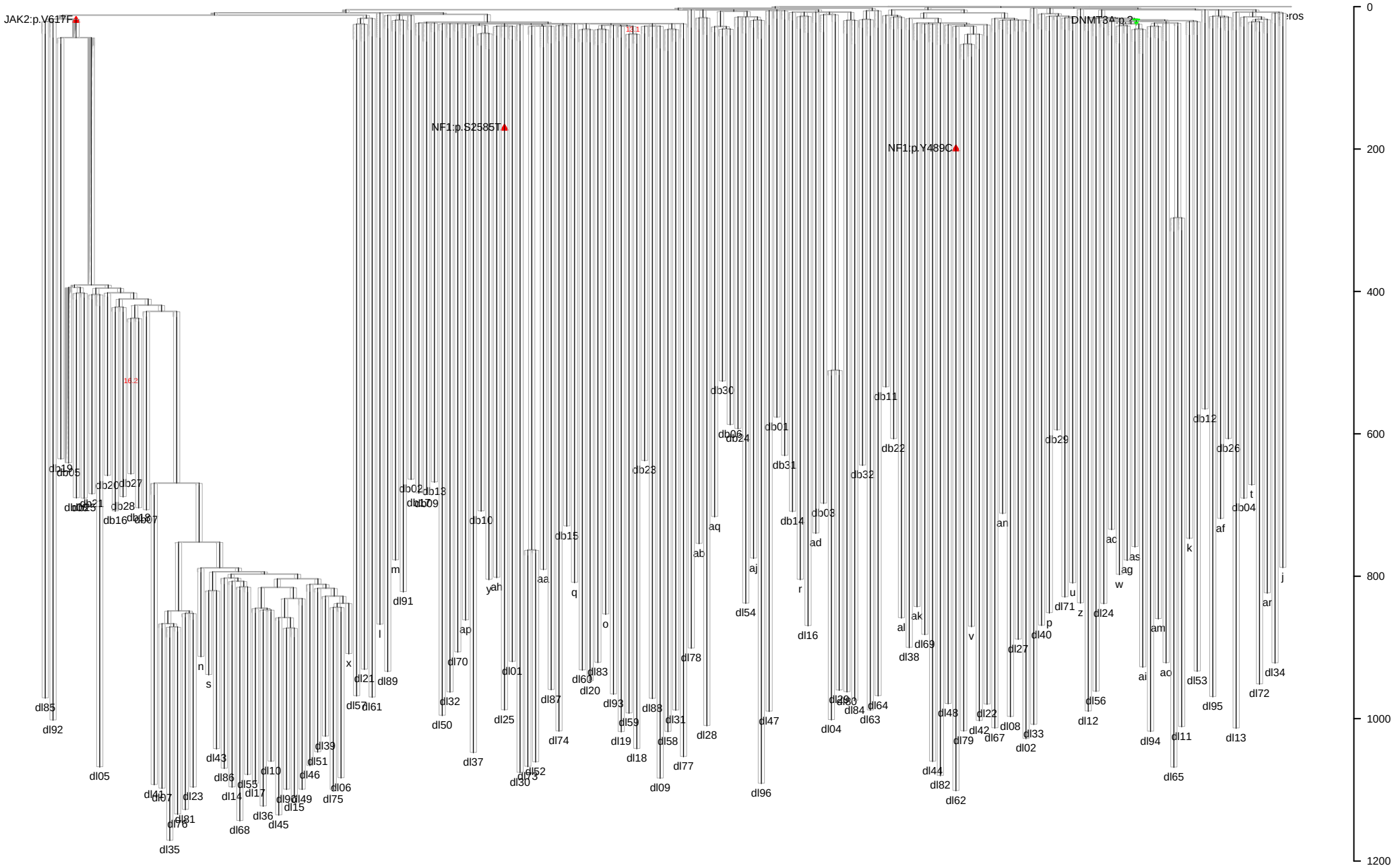
**PD5182: Annotated with VAF from dl92**
**Mean Depth=21.13**



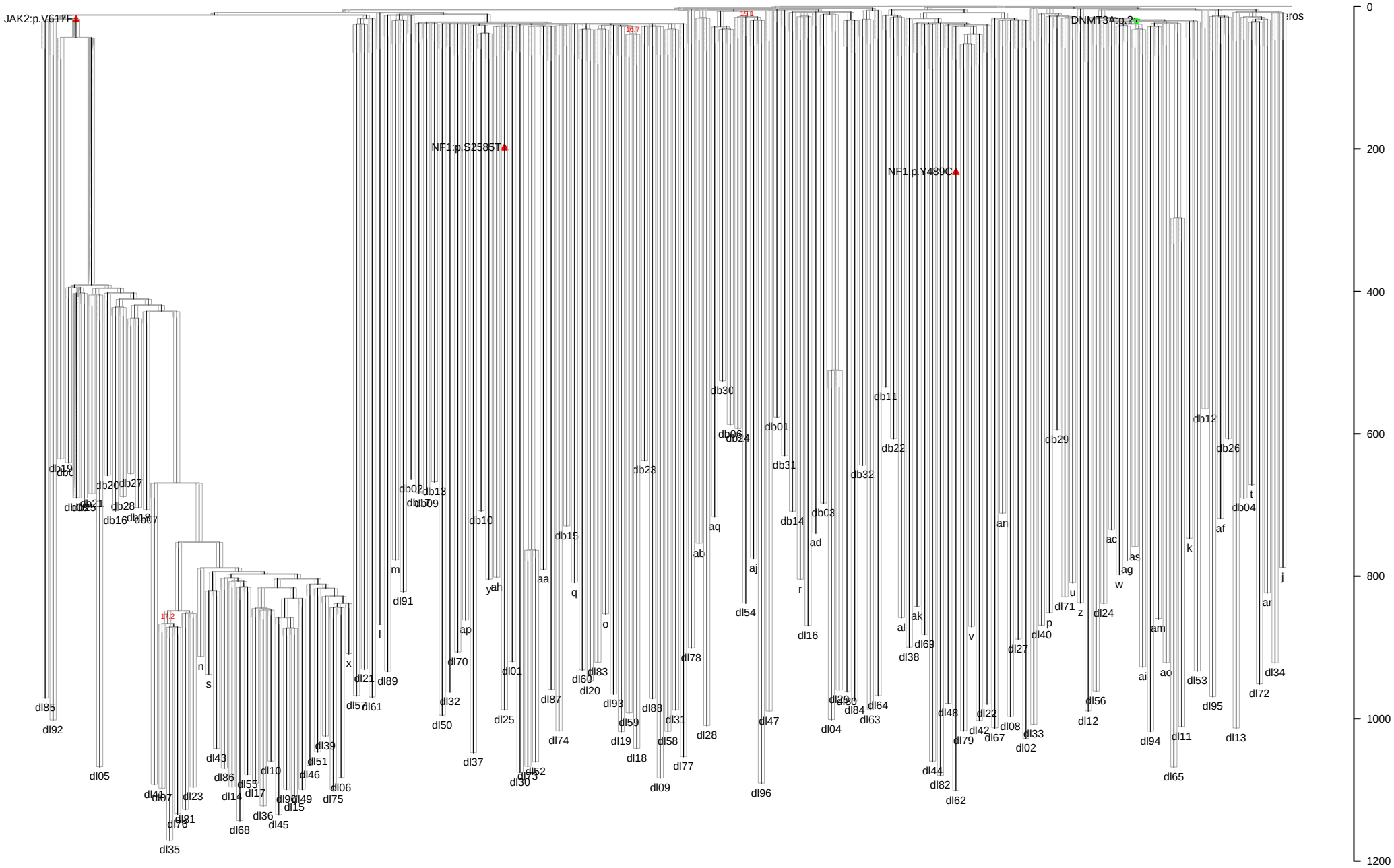
**PD5182: Annotated with VAF from db19**
**Mean Depth=17.43**



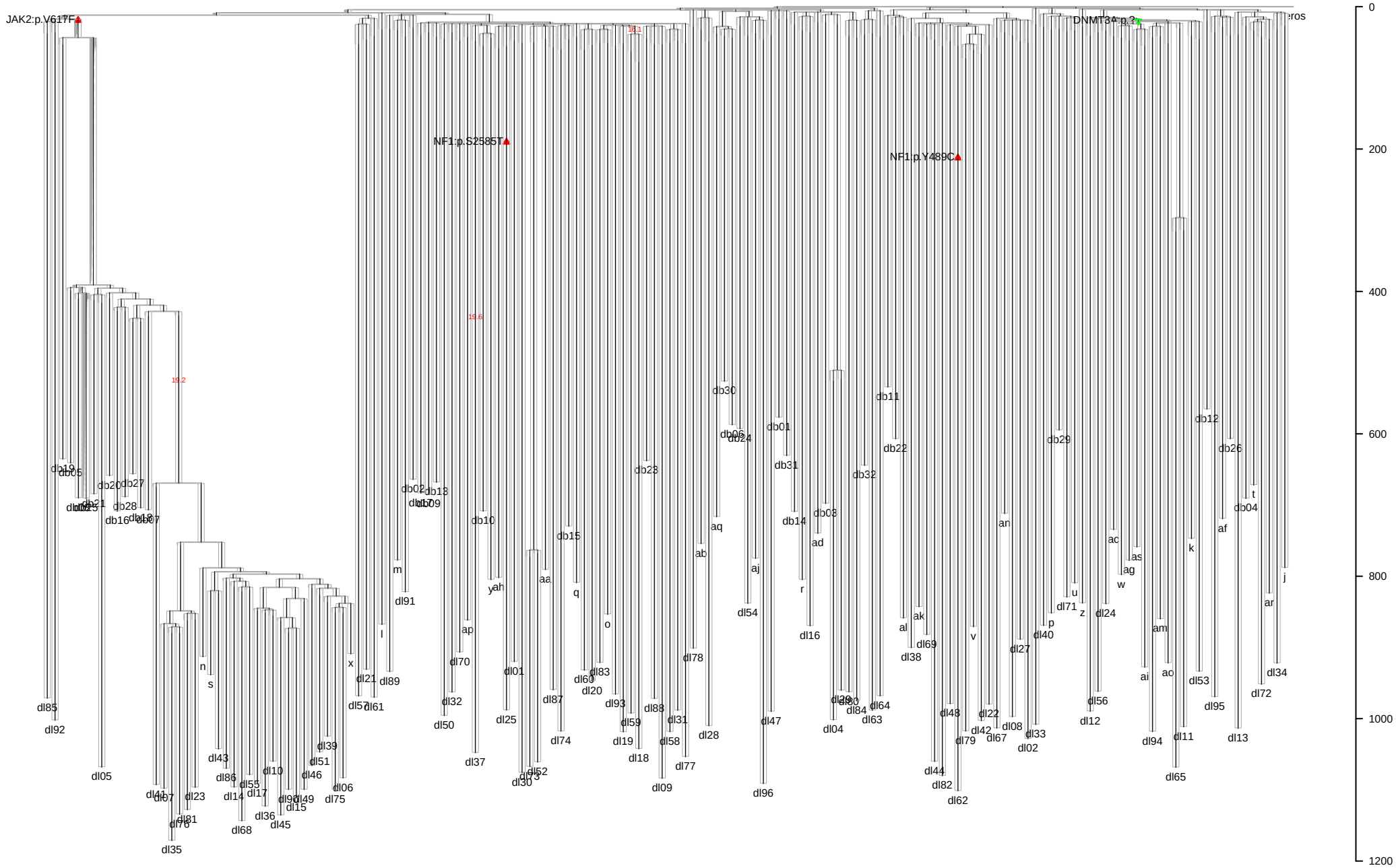
**PD5182: Annotated with VAF from db05**
**Mean Depth=17.10**



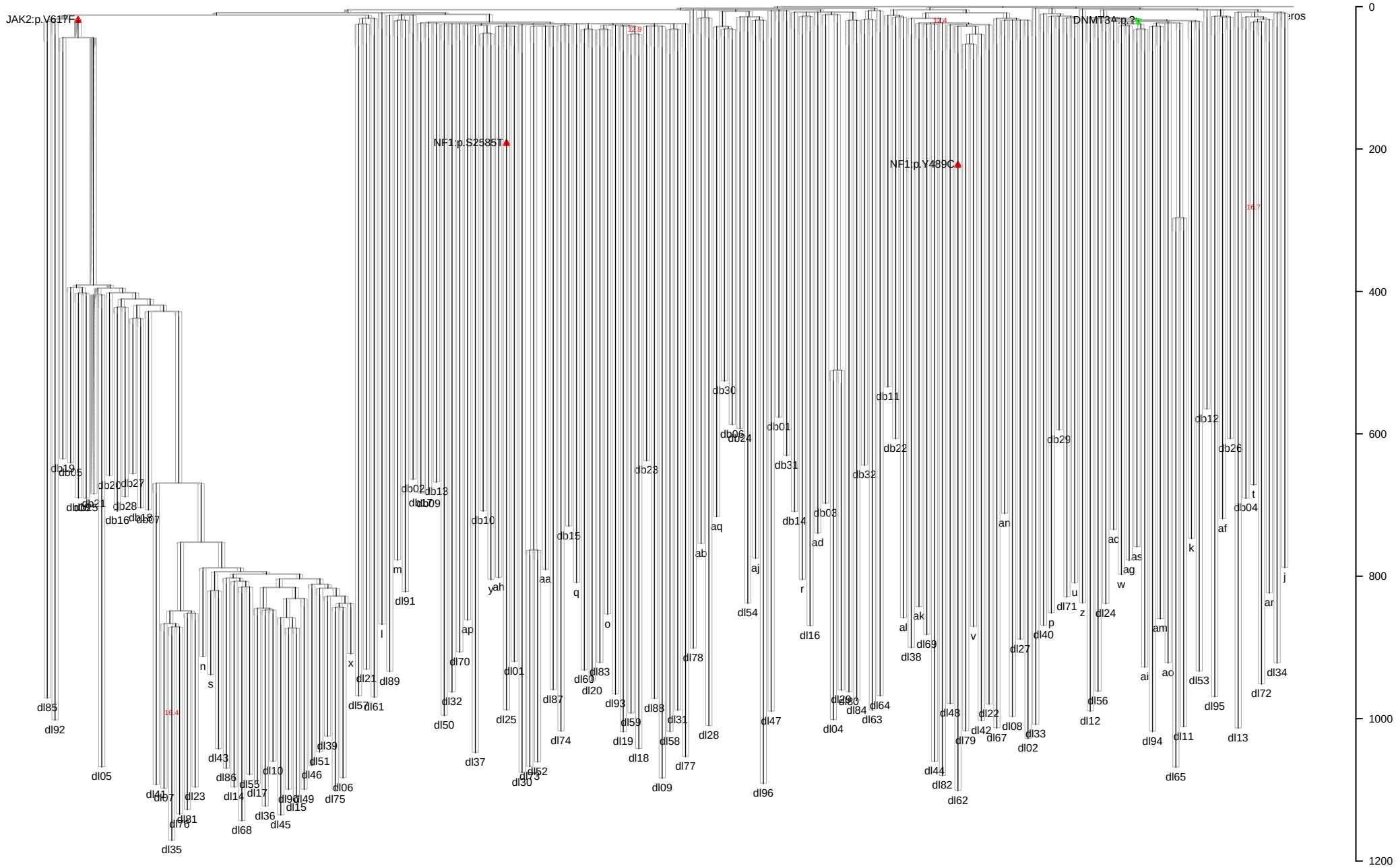
**PD5182: Annotated with VAF from db08**
**Mean Depth=20.61**



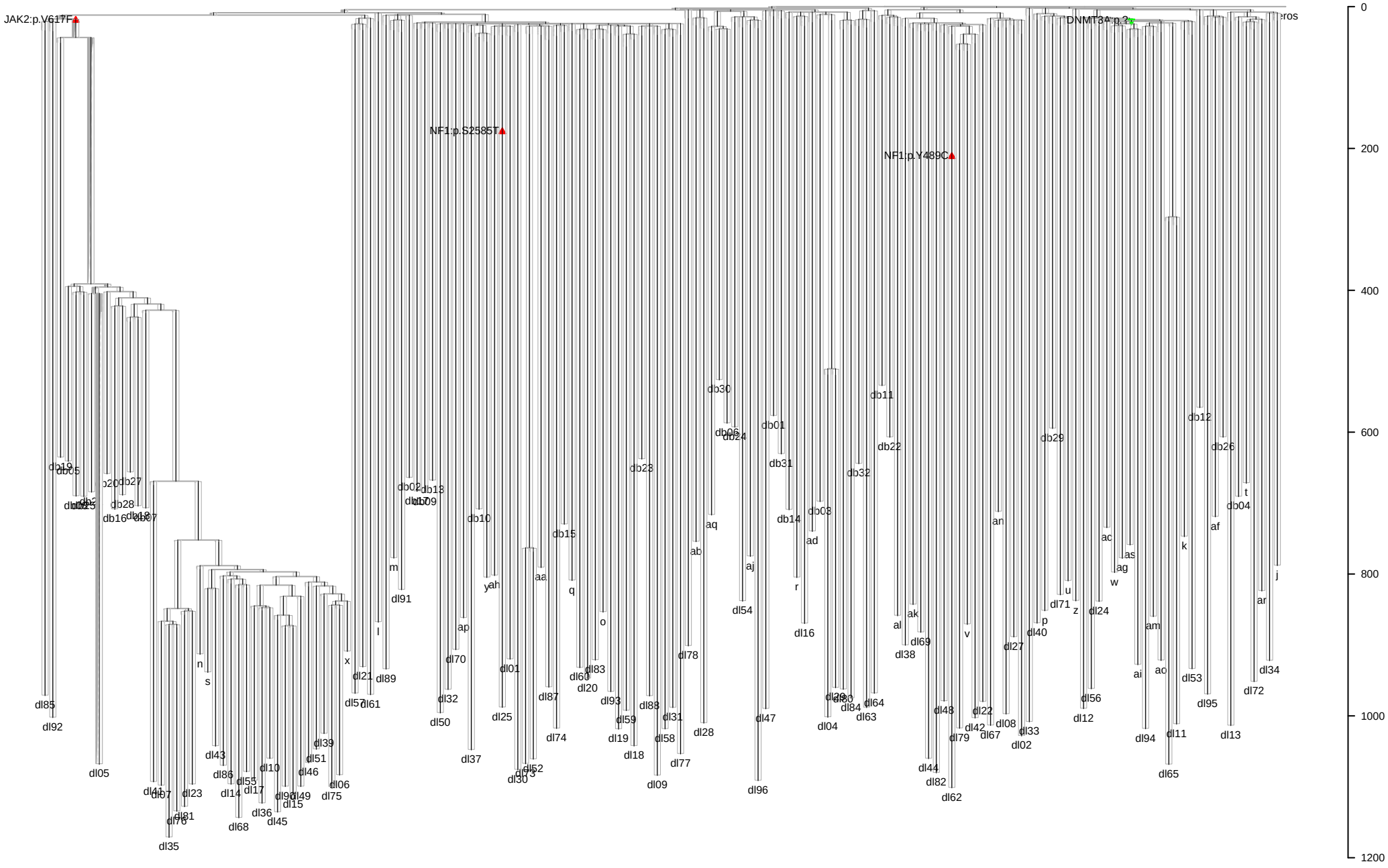
**PD5182: Annotated with VAF from db25**
**Mean Depth=20.03**



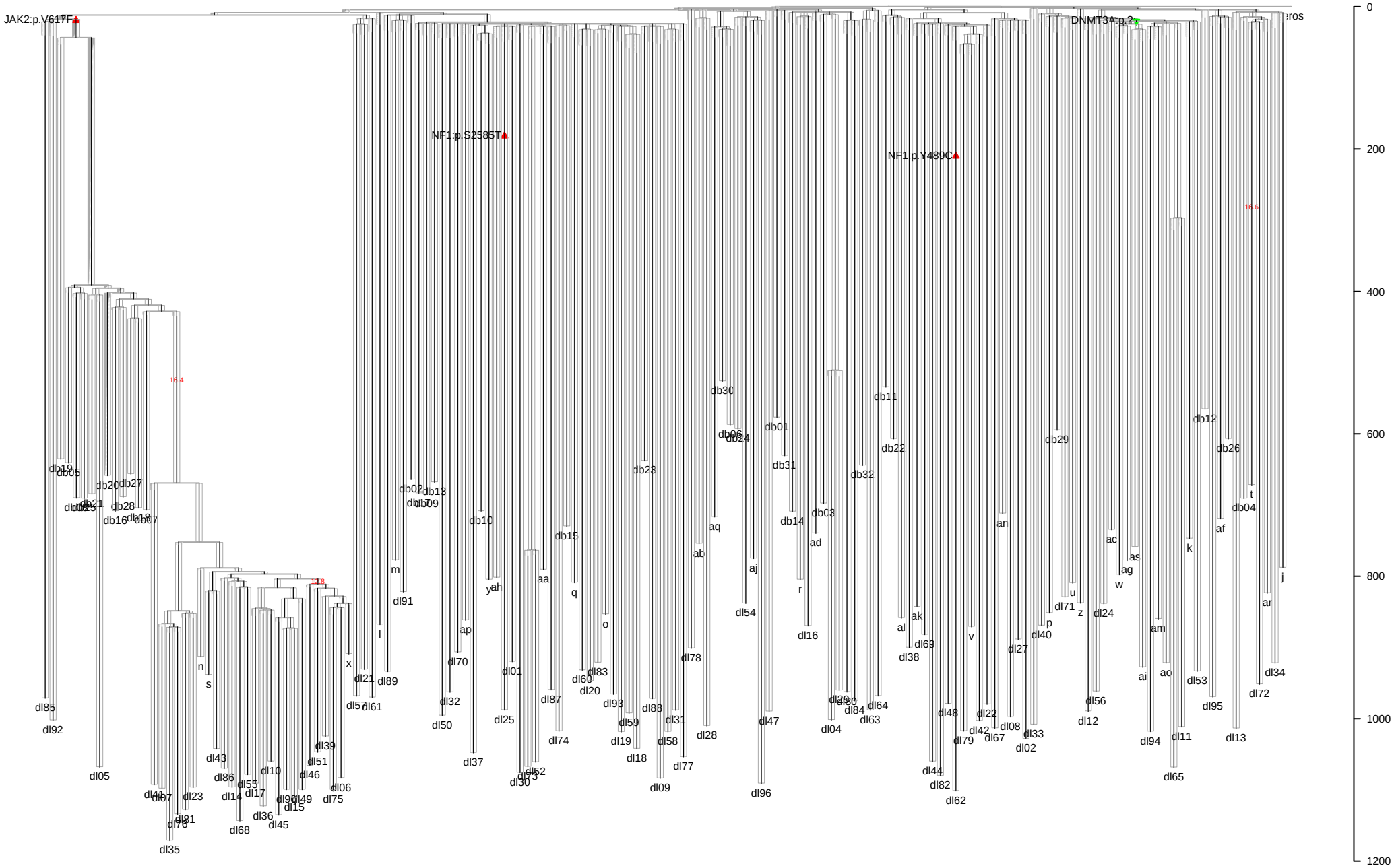
**PD5182: Annotated with VAF from db21**
**Mean Depth=17.31**



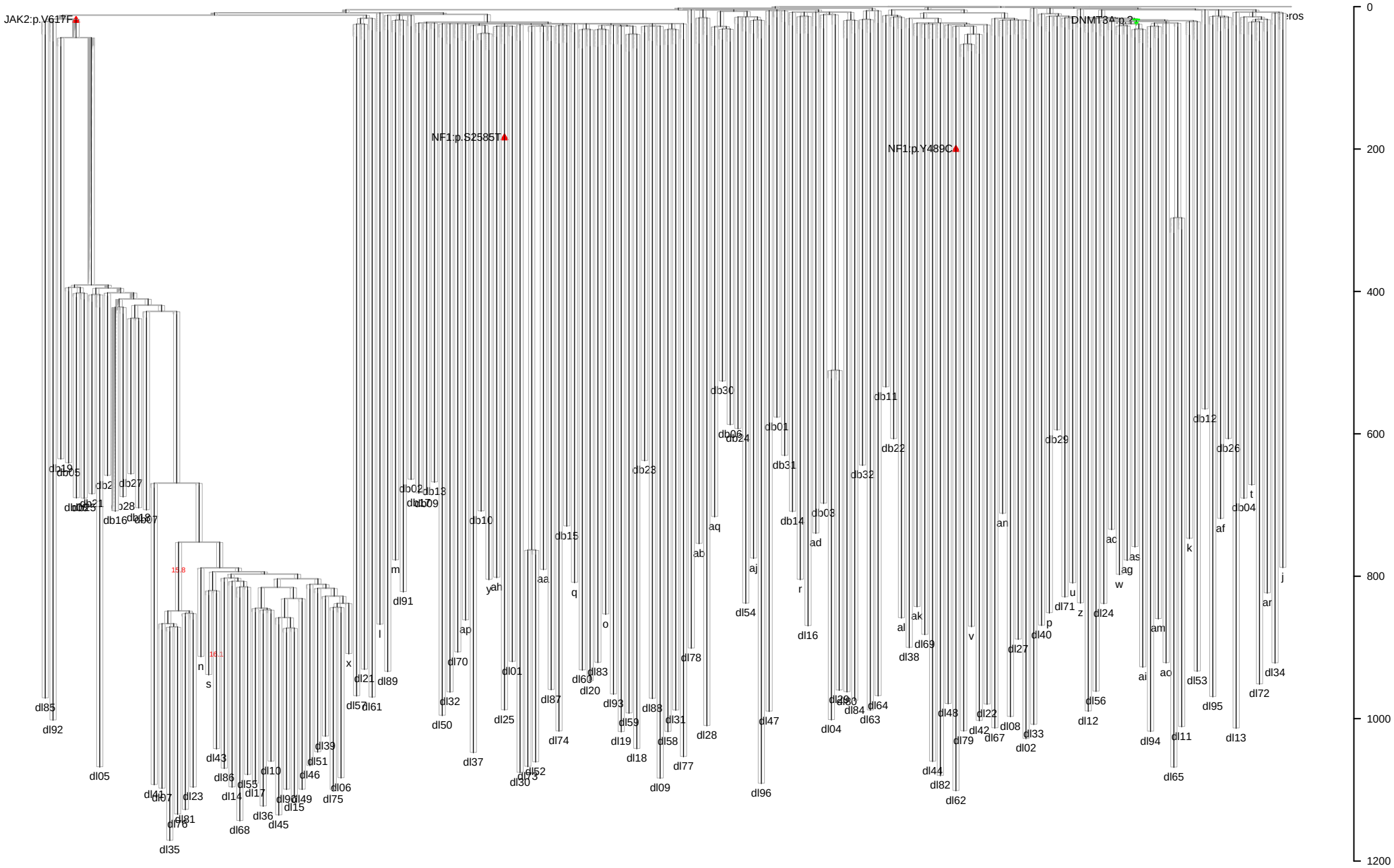
**PD5182: Annotated with VAF from dl05**
**Mean Depth=21.88**



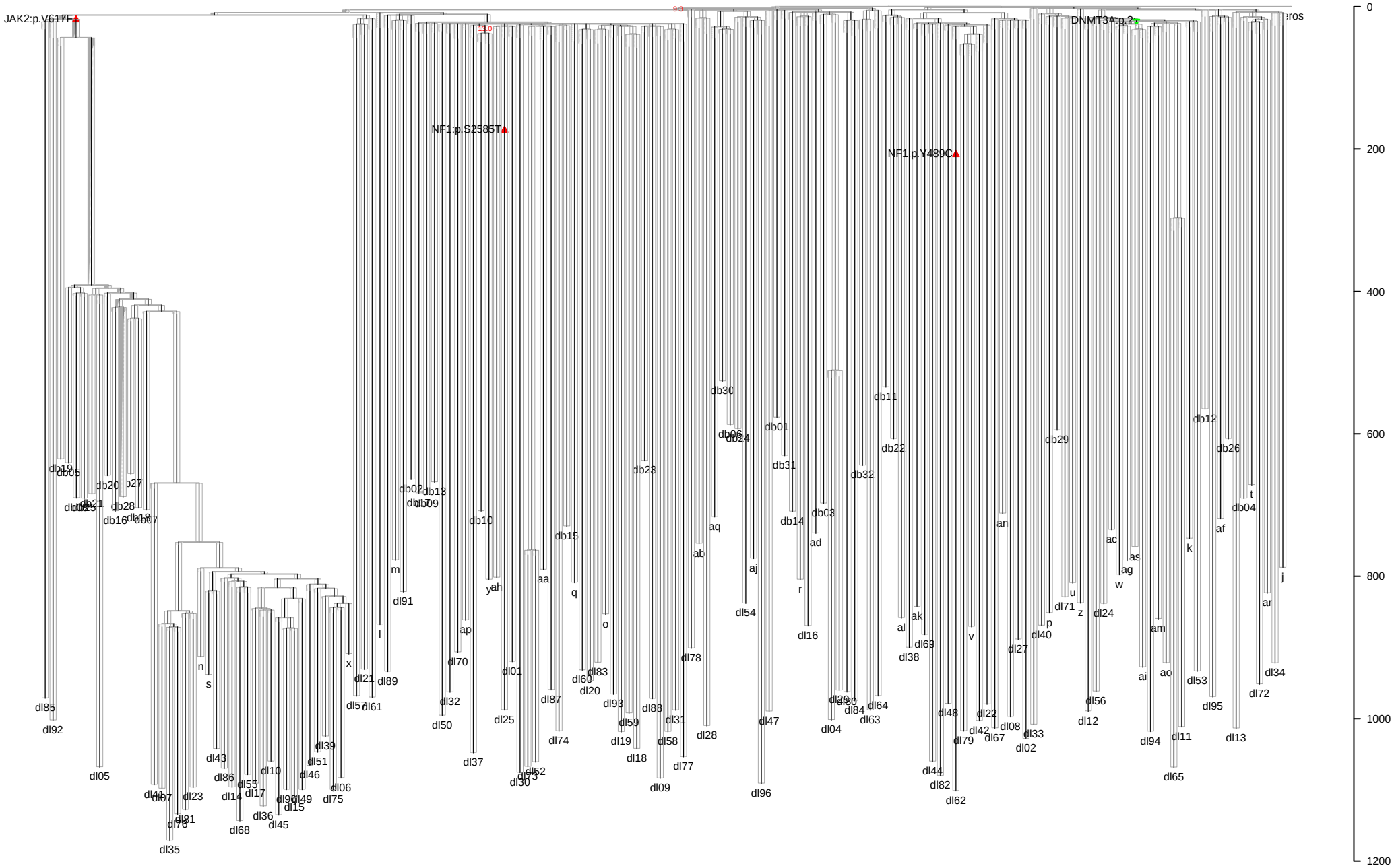
**PD5182: Annotated with VAF from db20**
**Mean Depth=17.26**



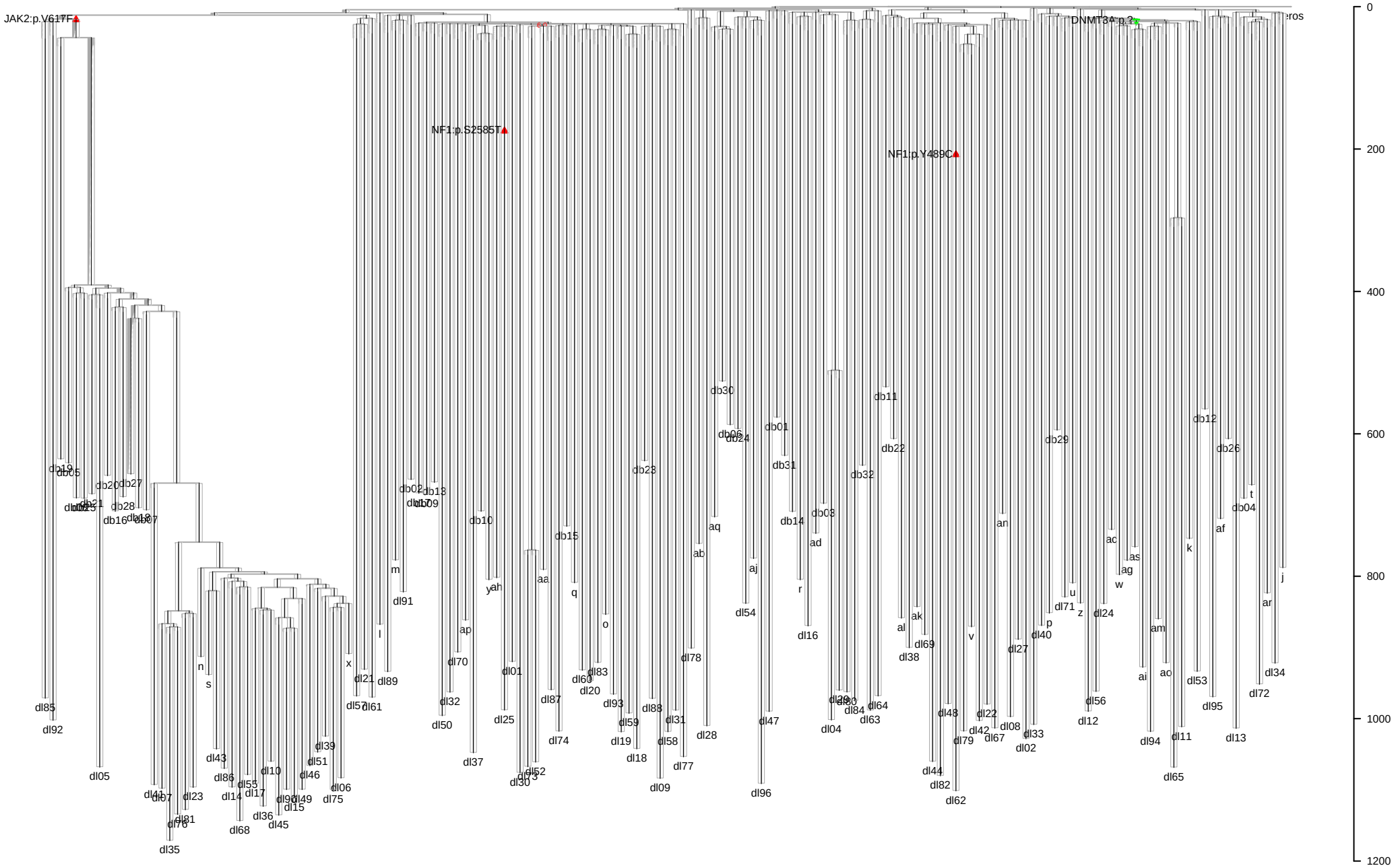
**PD5182: Annotated with VAF from db16**
**Mean Depth=17.04**



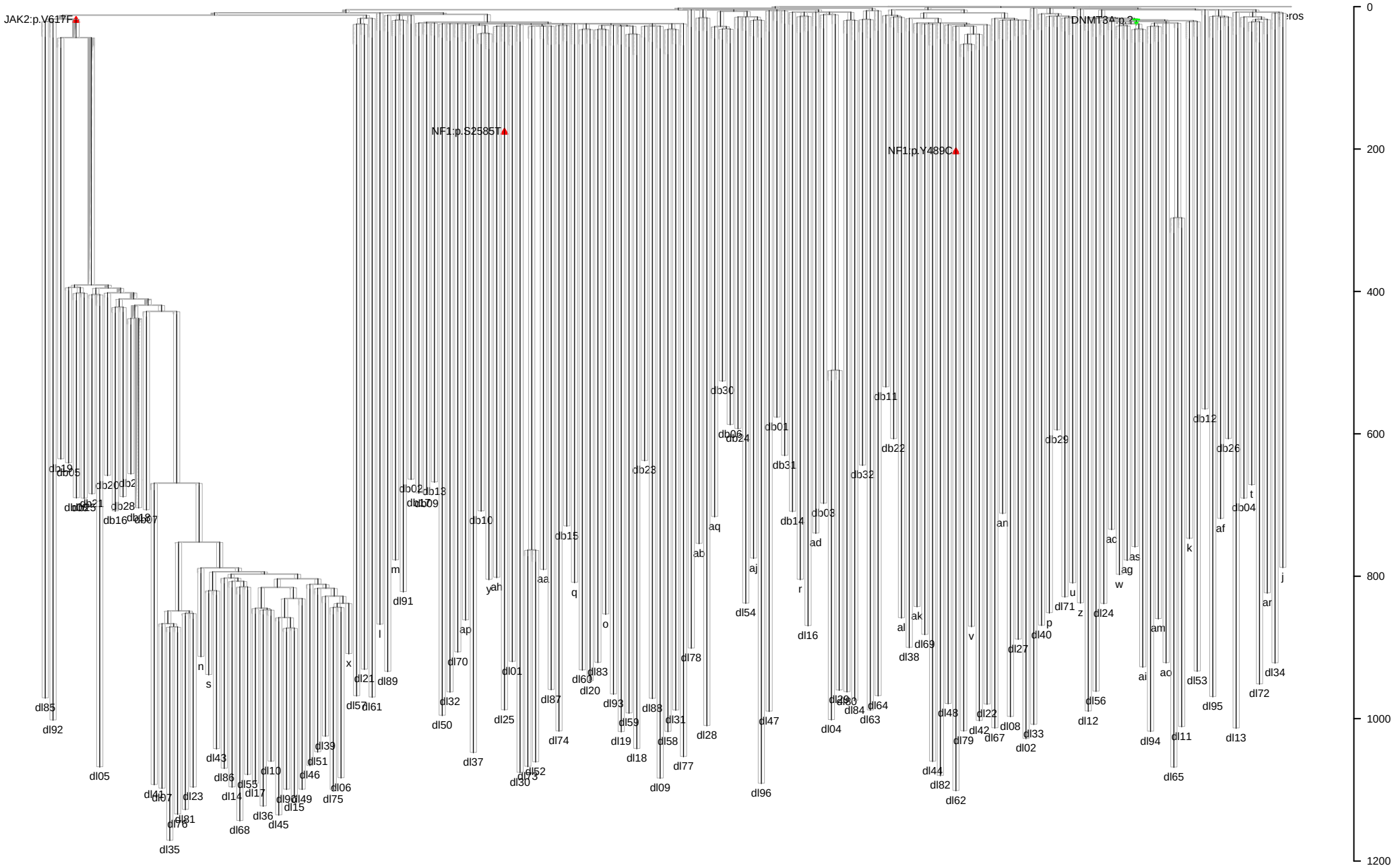
**PD5182: Annotated with VAF from db28**
**Mean Depth=16.99**



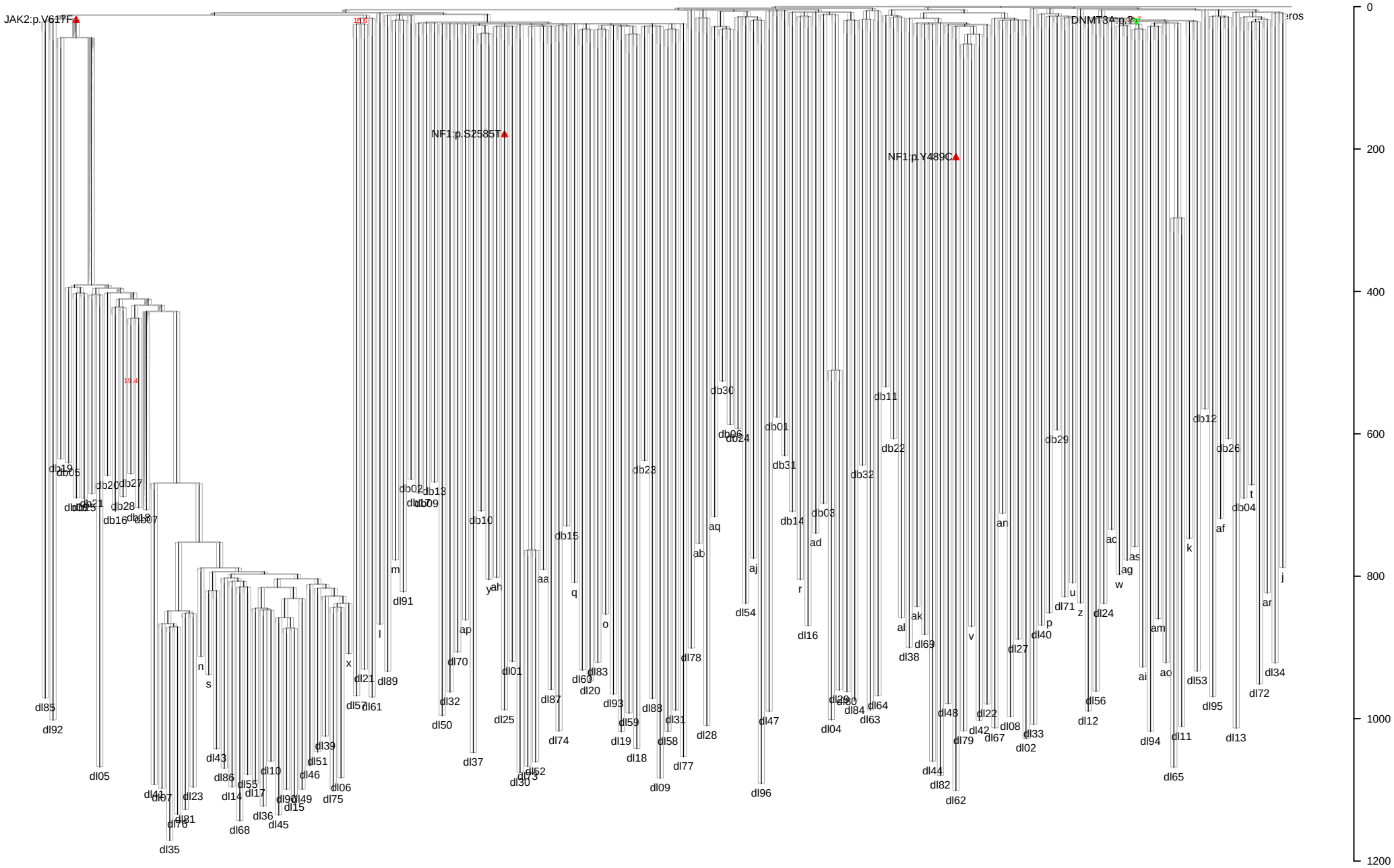
**PD5182: Annotated with VAF from db27**
**Mean Depth=17.24**



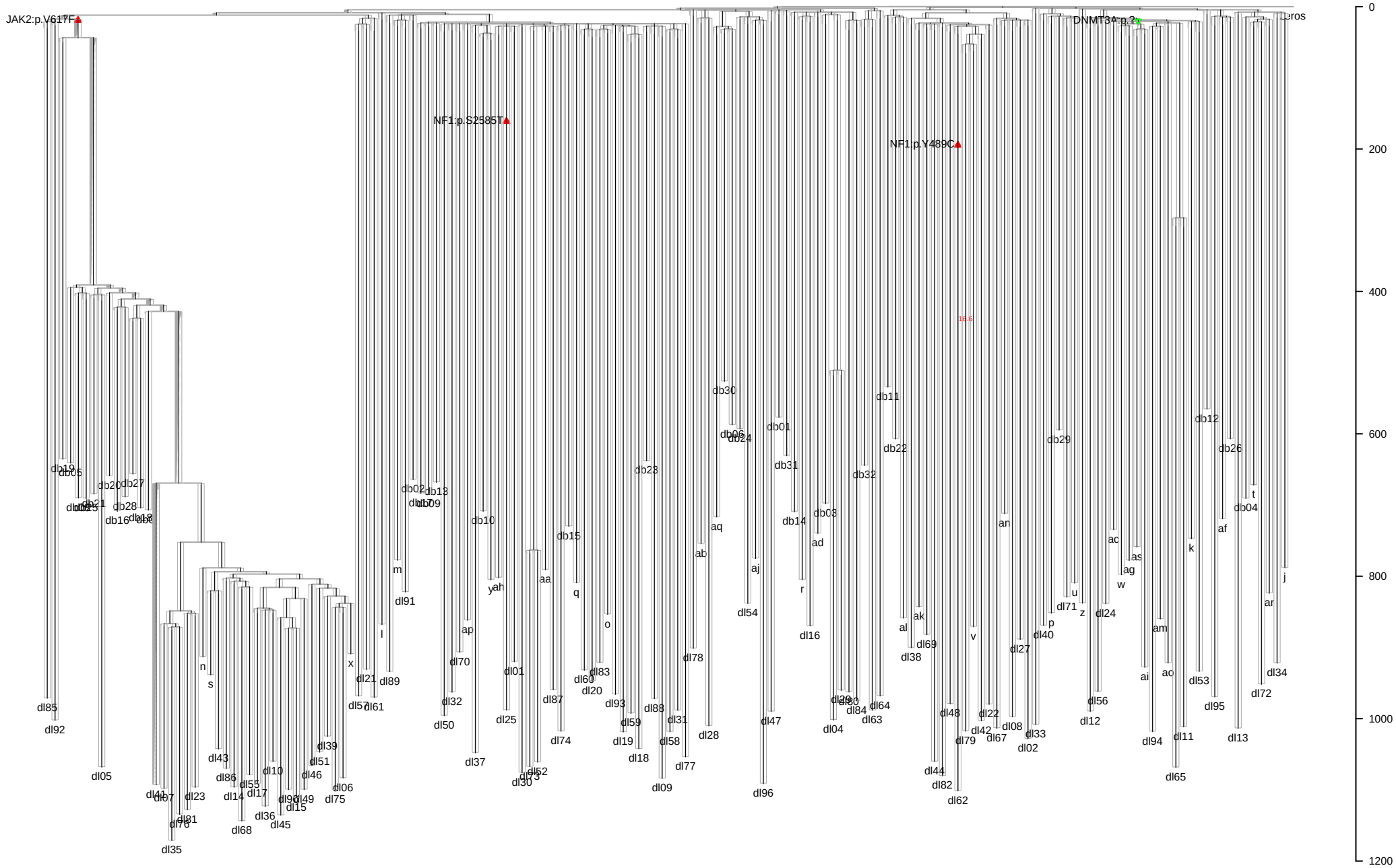
**PD5182: Annotated with VAF from db18**
**Mean Depth=17.11**



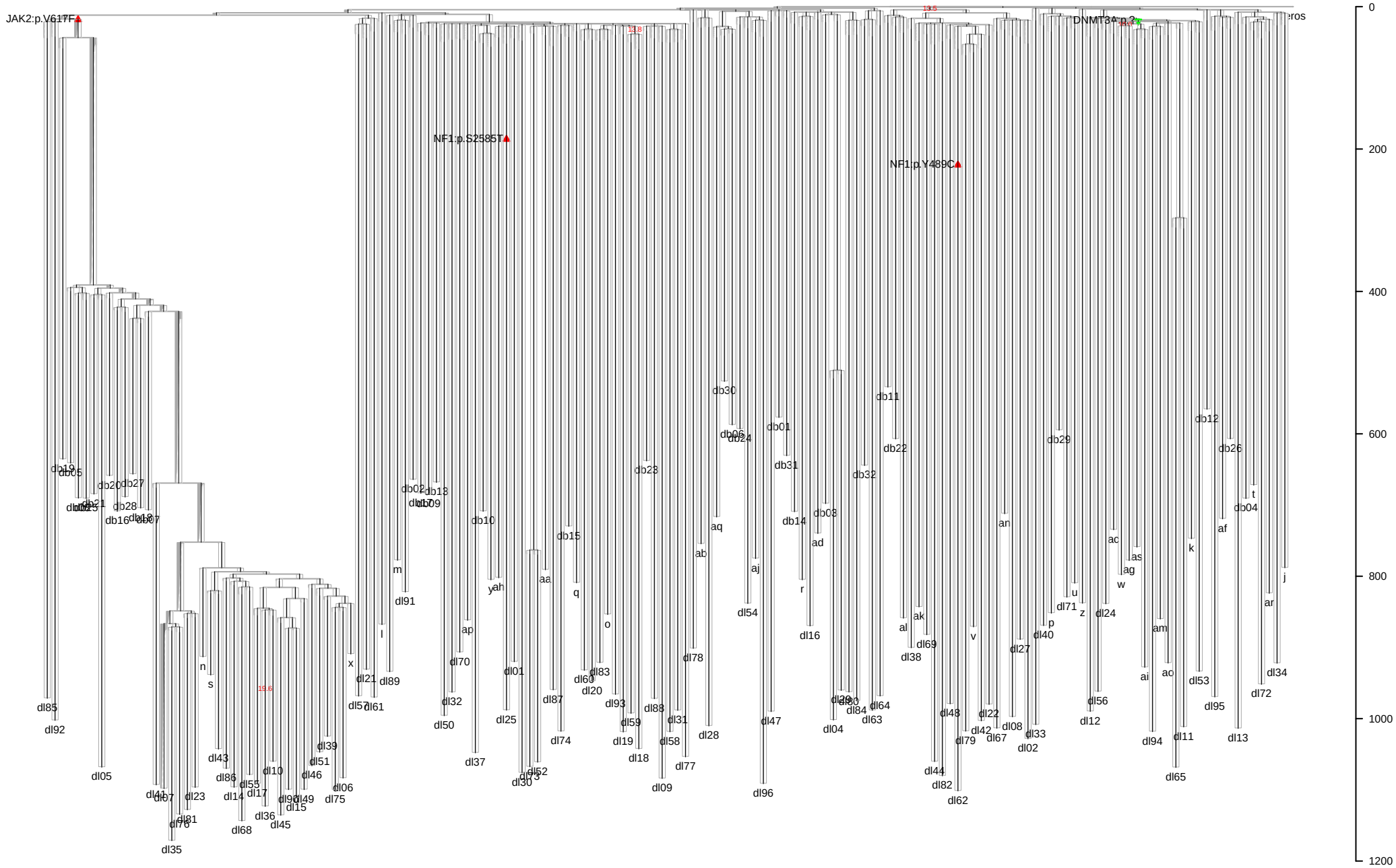
**PD5182: Annotated with VAF from db07**
**Mean Depth=20.31**



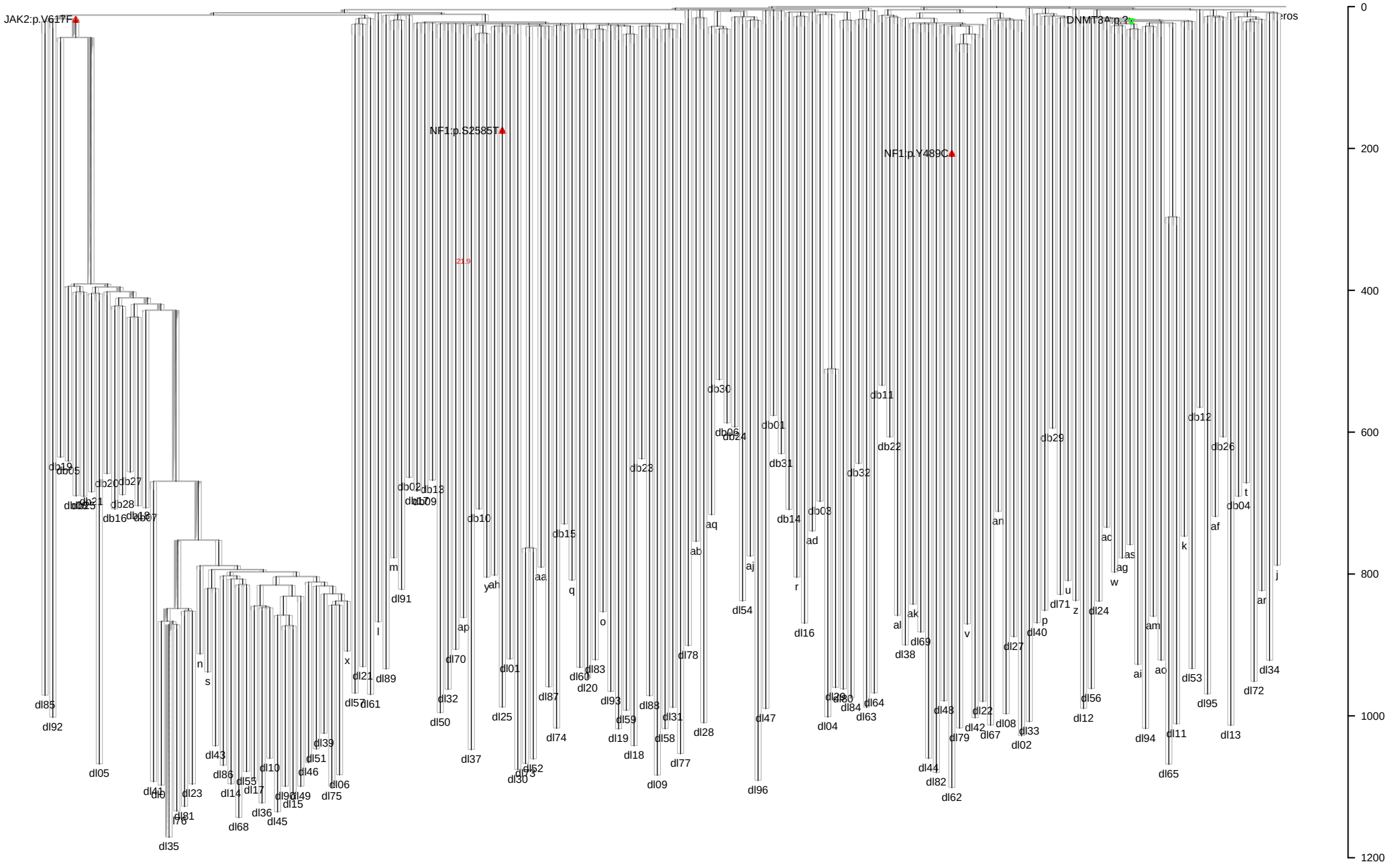
**PD5182: Annotated with VAF from dl41**
**Mean Depth=17.06**



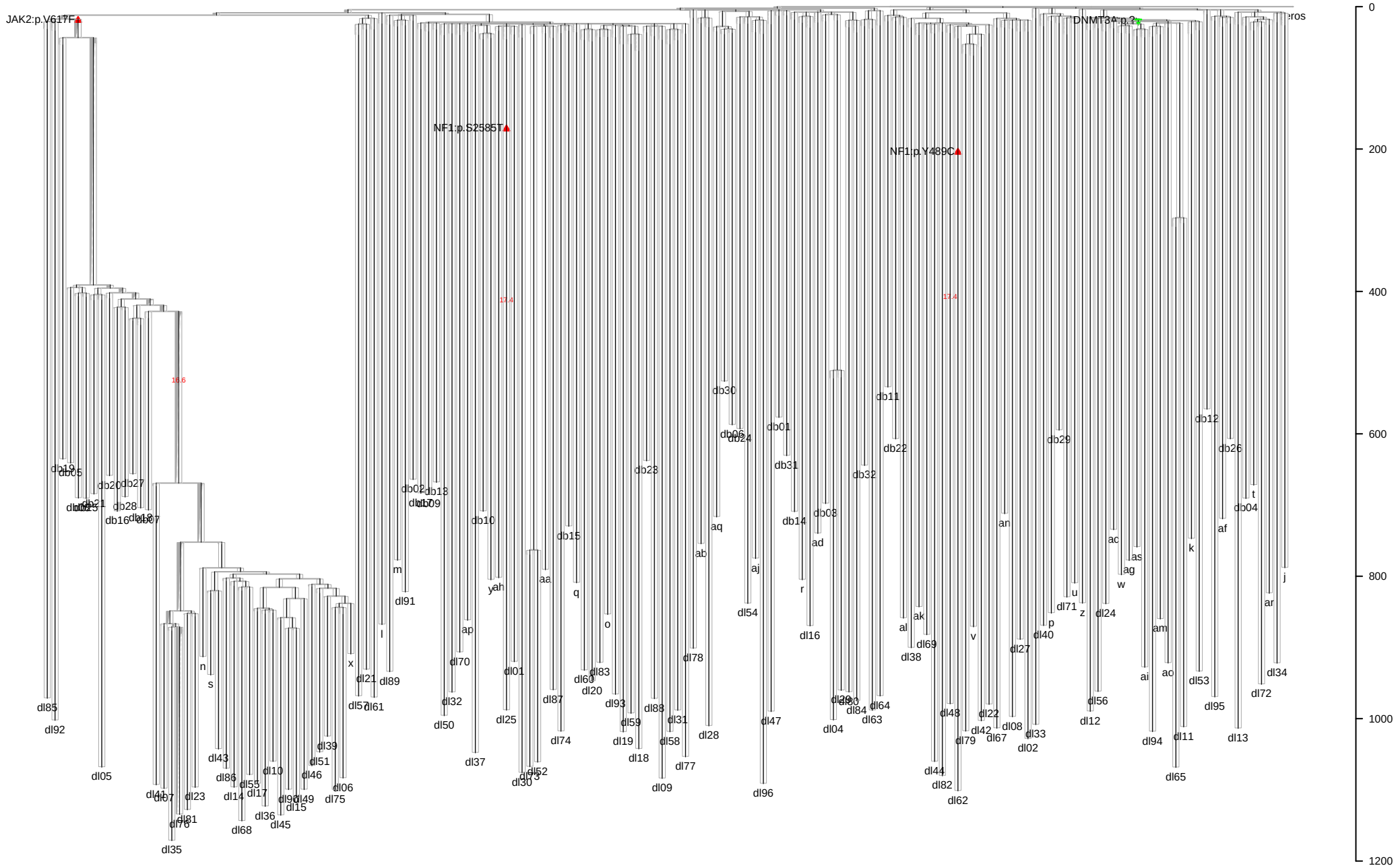
**PD5182: Annotated with VAF from dl07**
**Mean Depth=20.71**



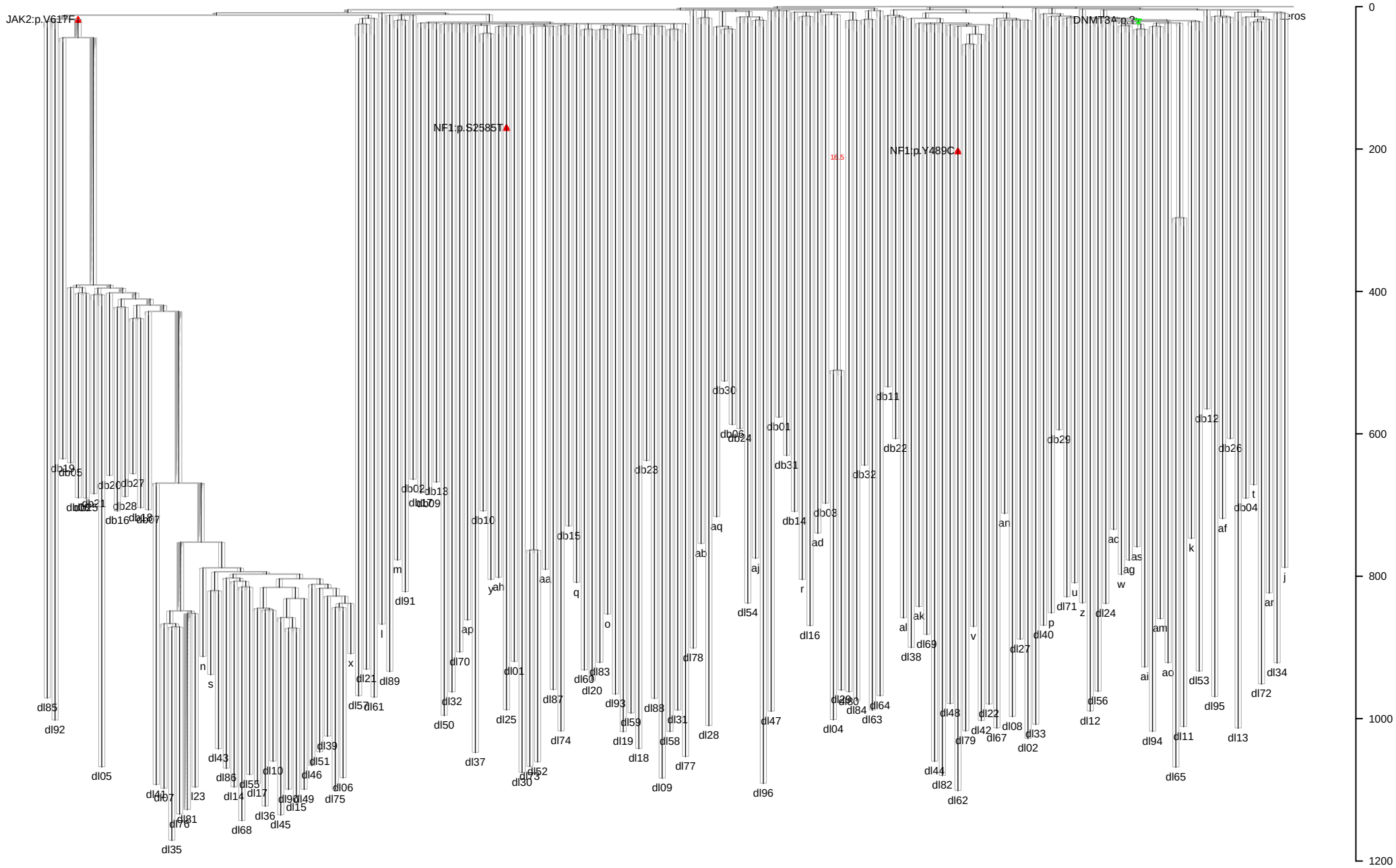
**PD5182: Annotated with VAF from dl35**
**Mean Depth=22.53**



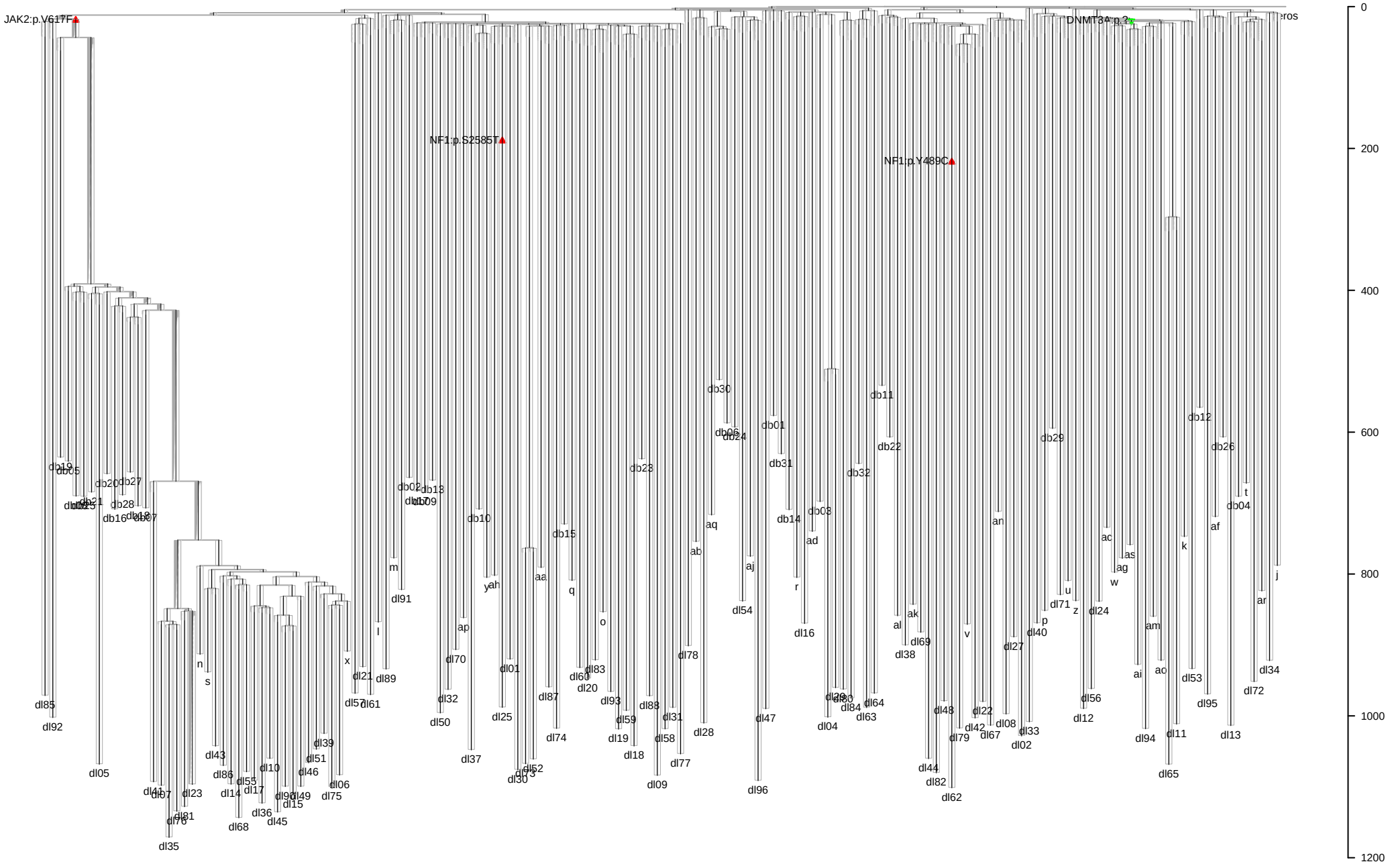
**PD5182: Annotated with VAF from dl76**
**Mean Depth=17.82**



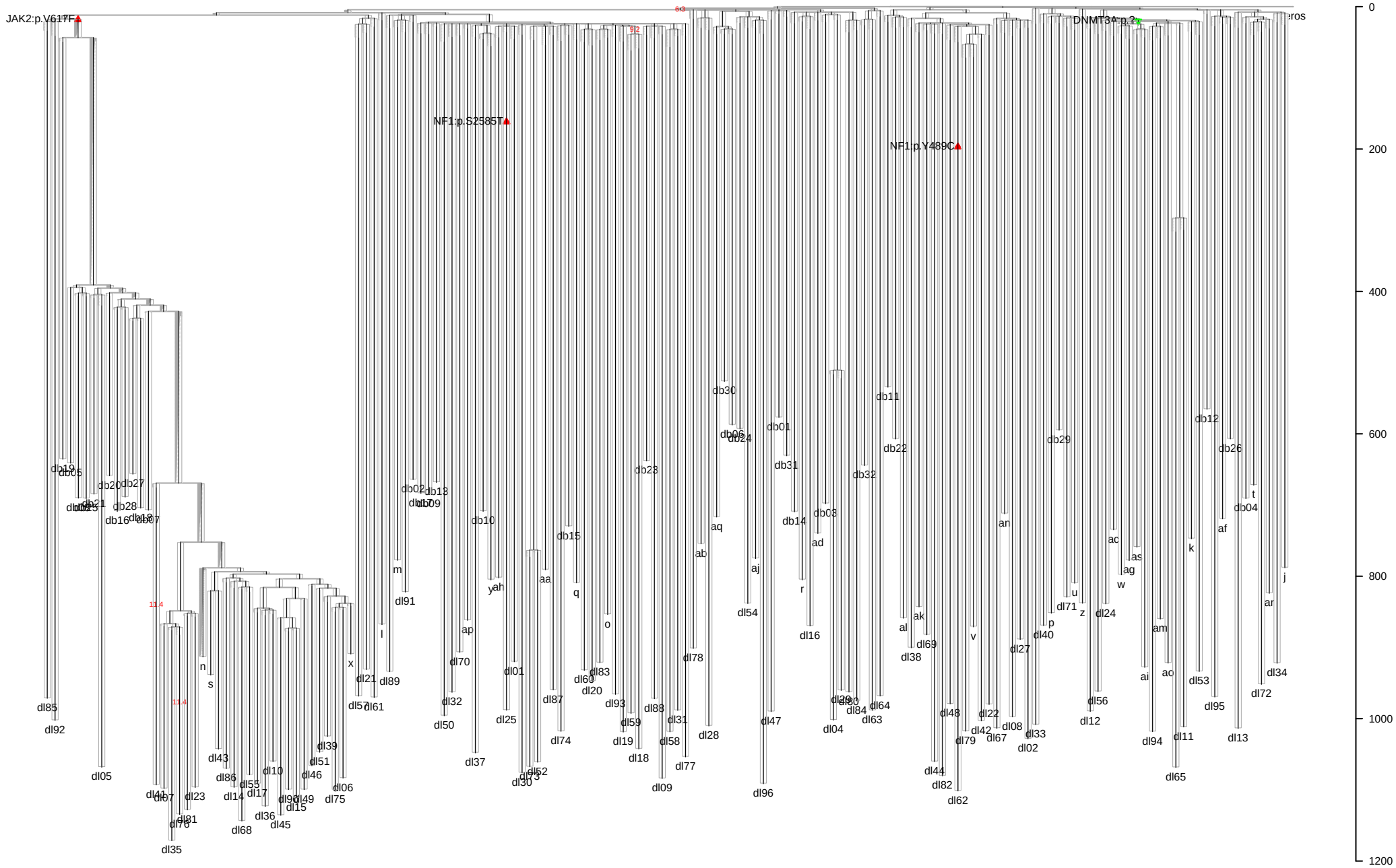
**PD5182: Annotated with VAF from dl81**
**Mean Depth=17.03**



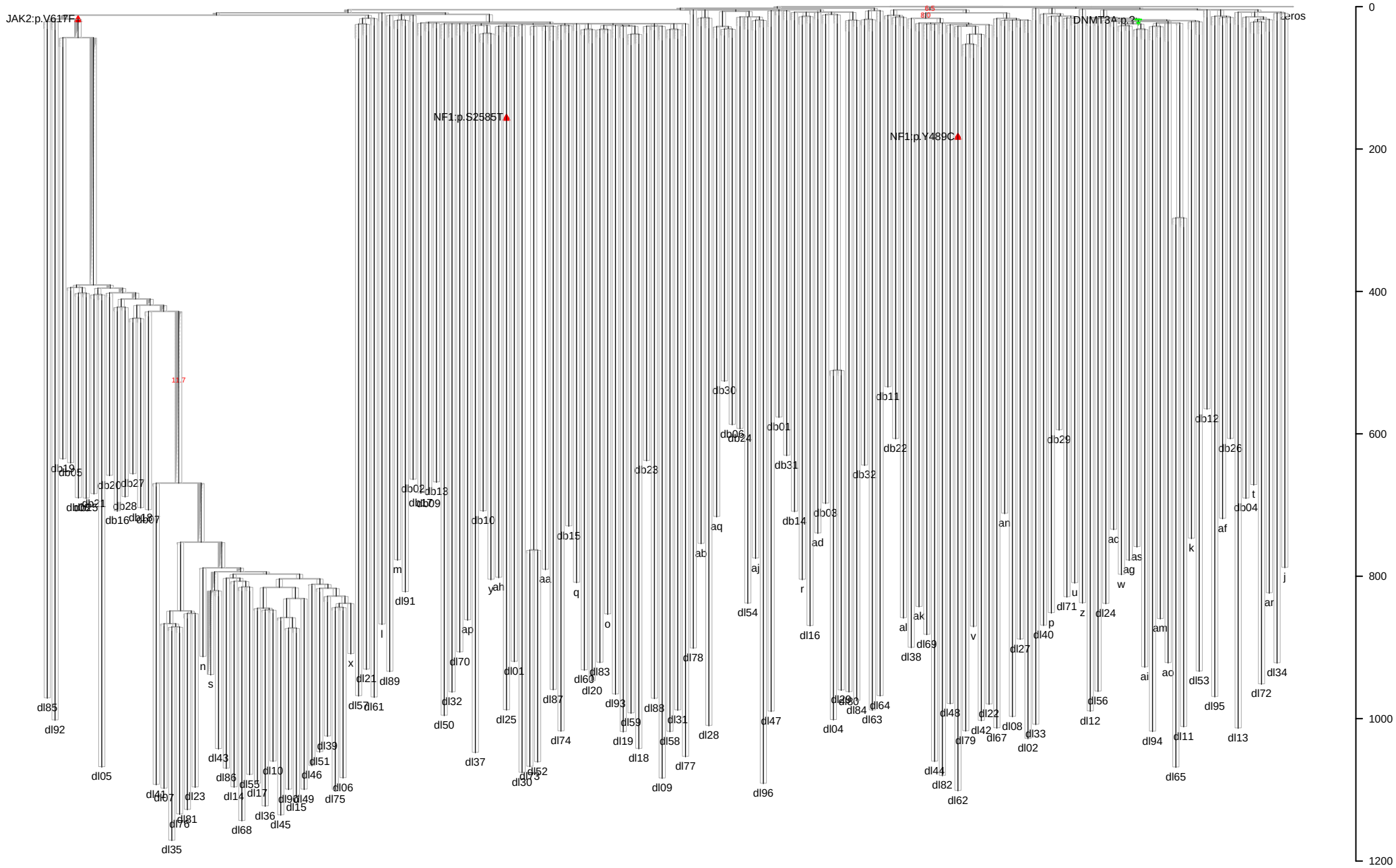
**PD5182: Annotated with VAF from dl23**
**Mean Depth=19.37**



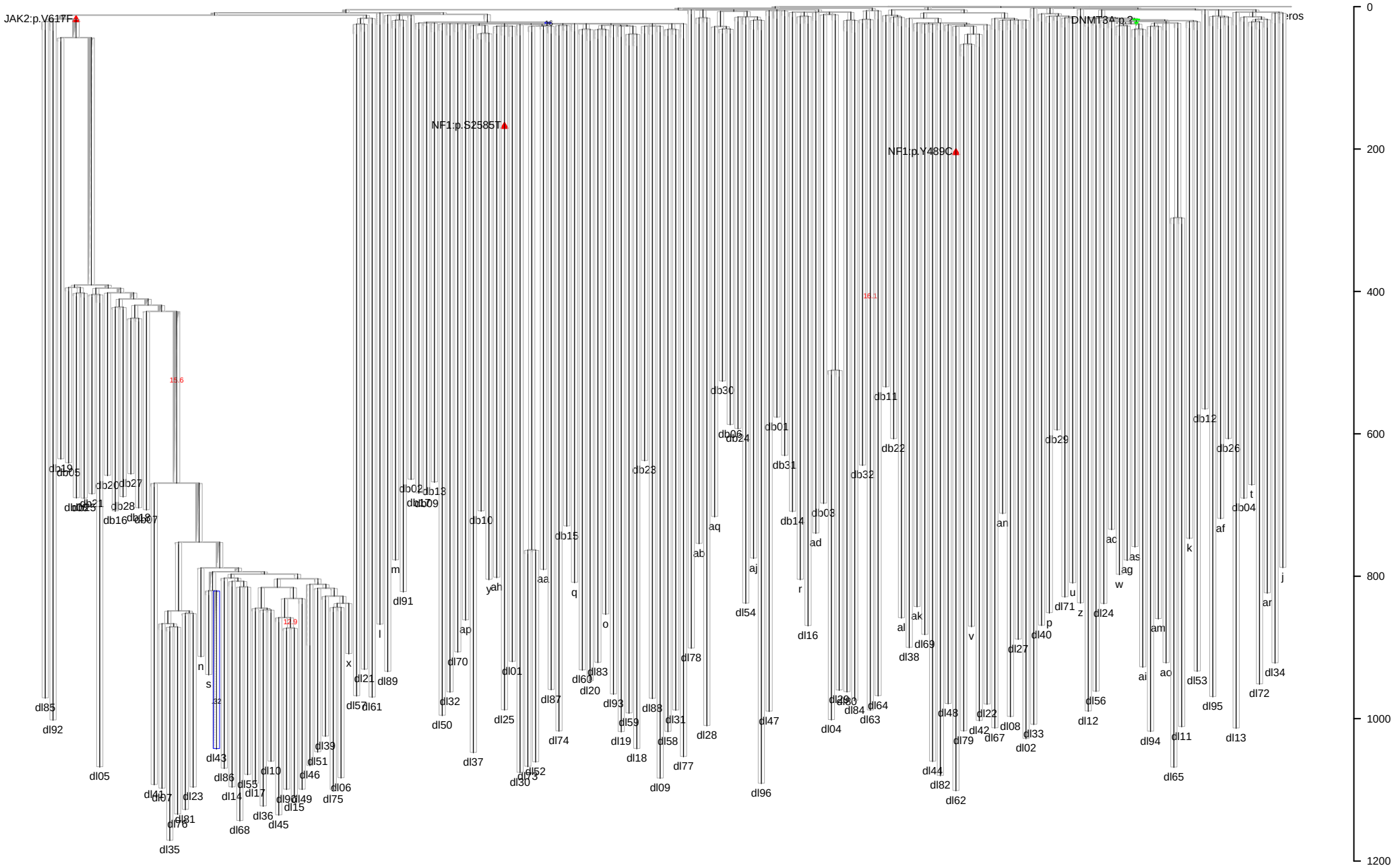
**PD5182: Annotated with VAF from n**
**Mean Depth=12.04**



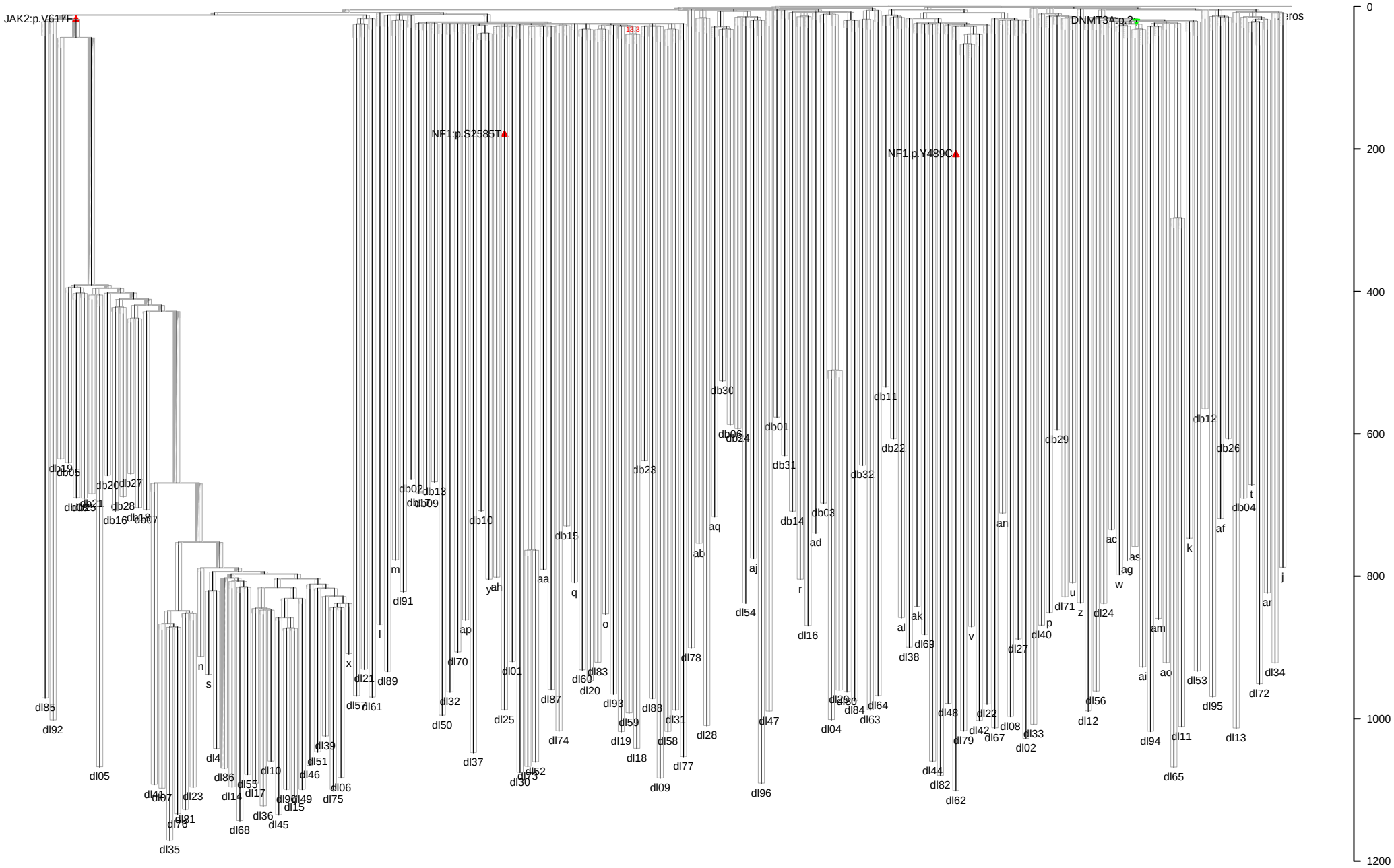
**PD5182: Annotated with VAF from s**
**Mean Depth=12.37**



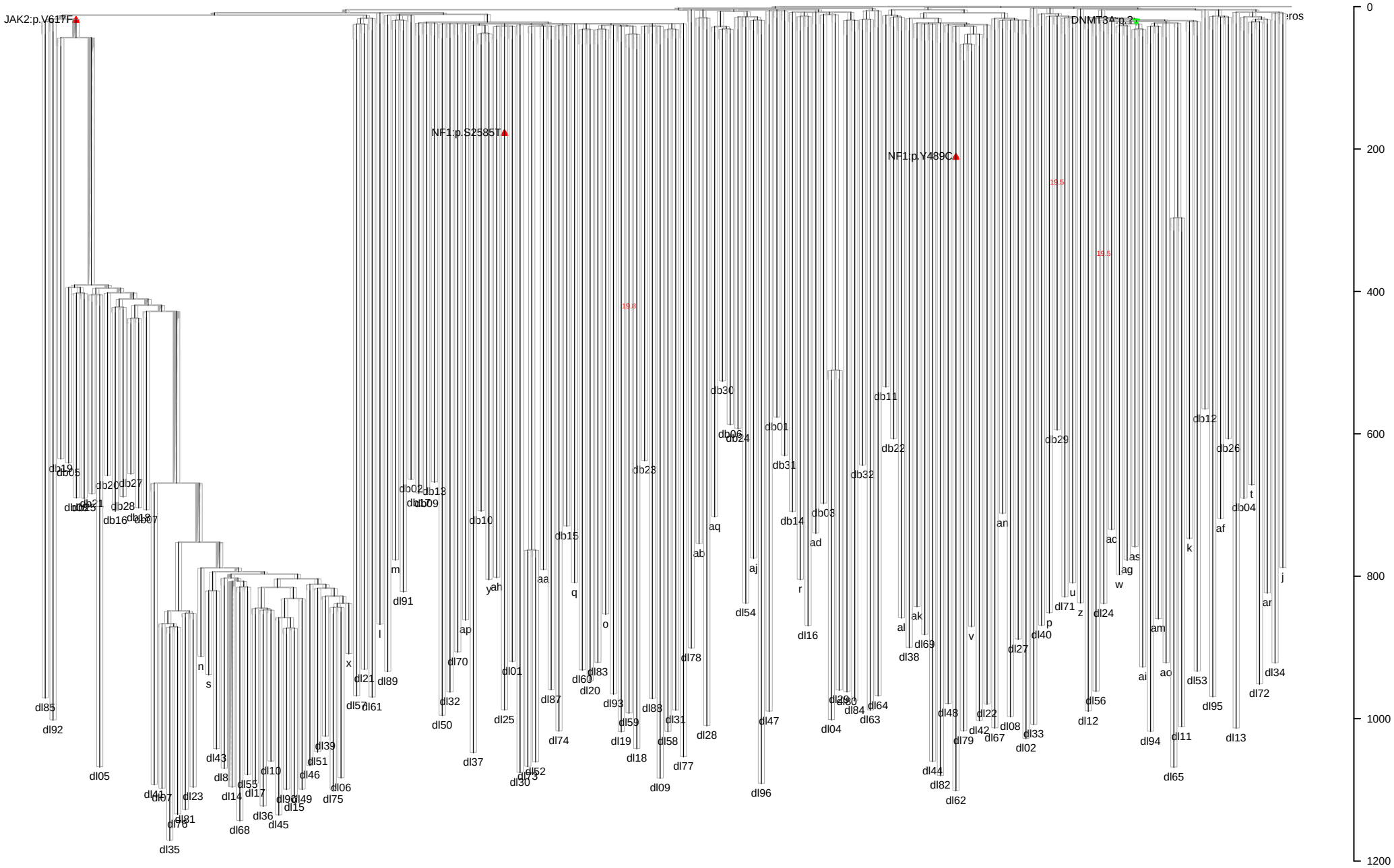
**PD5182: Annotated with VAF from dl43**
**Mean Depth=16.47**



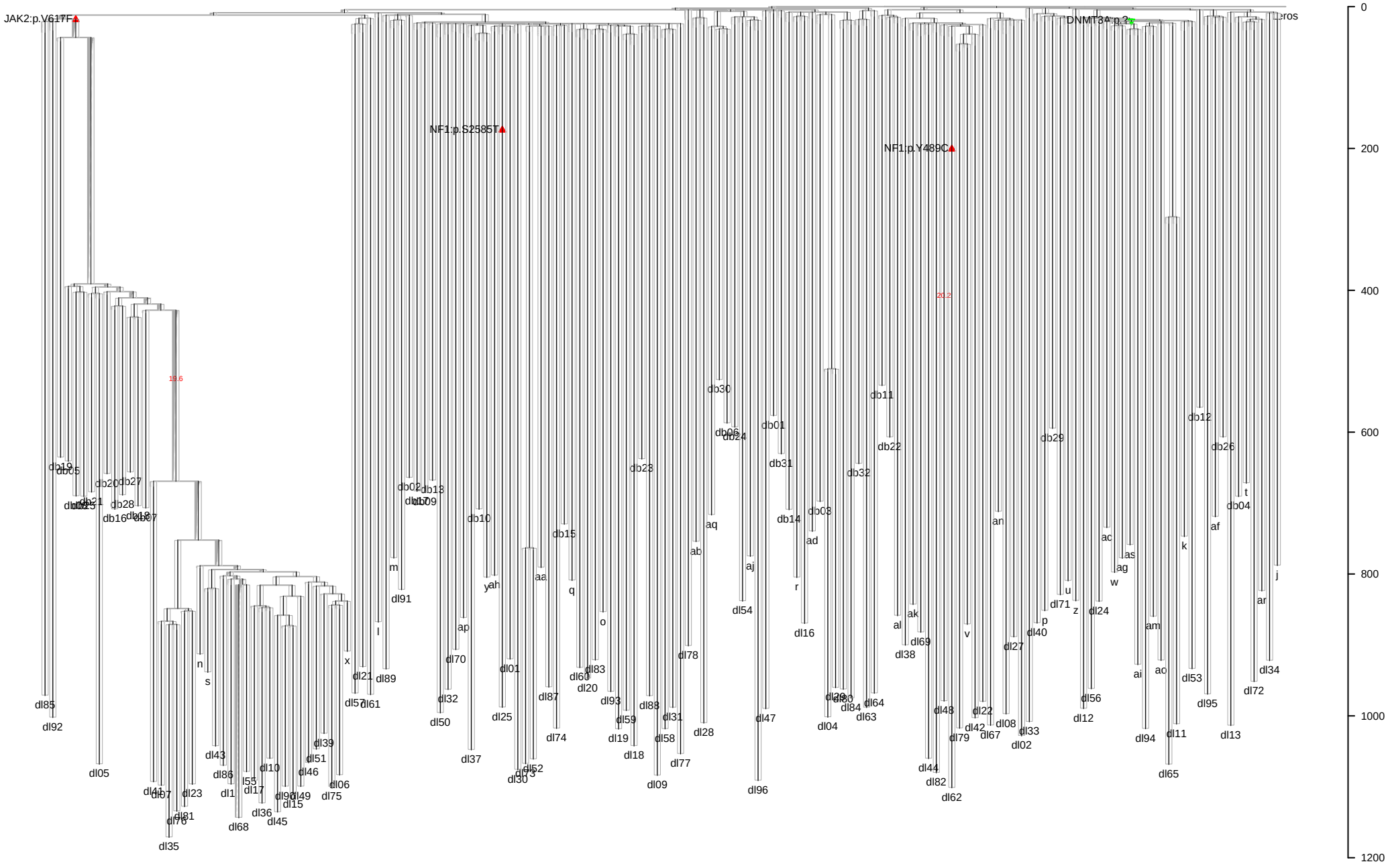
**PD5182: Annotated with VAF from dl86**
**Mean Depth=19.28**



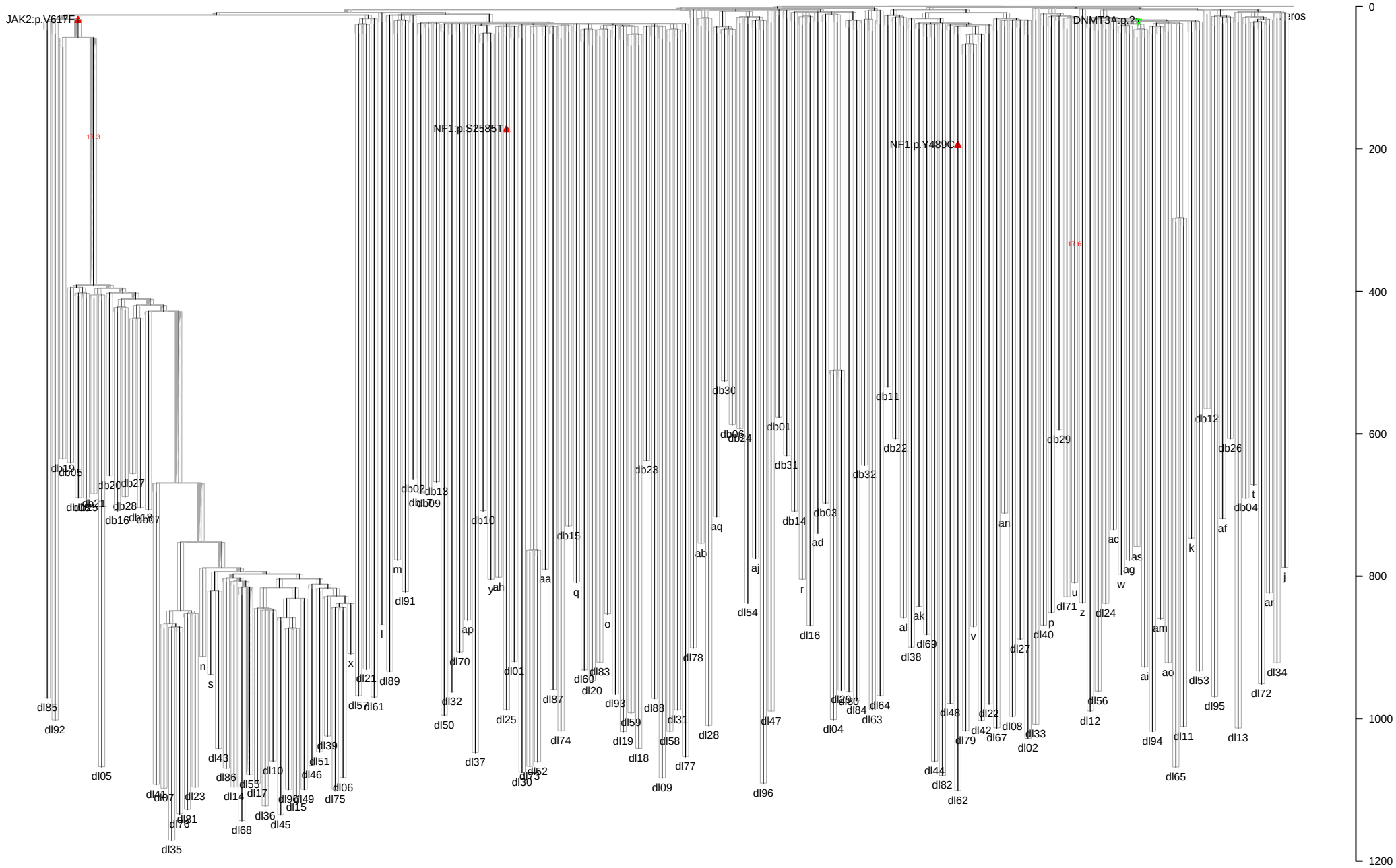
**PD5182: Annotated with VAF from dl14**
**Mean Depth=20.23**



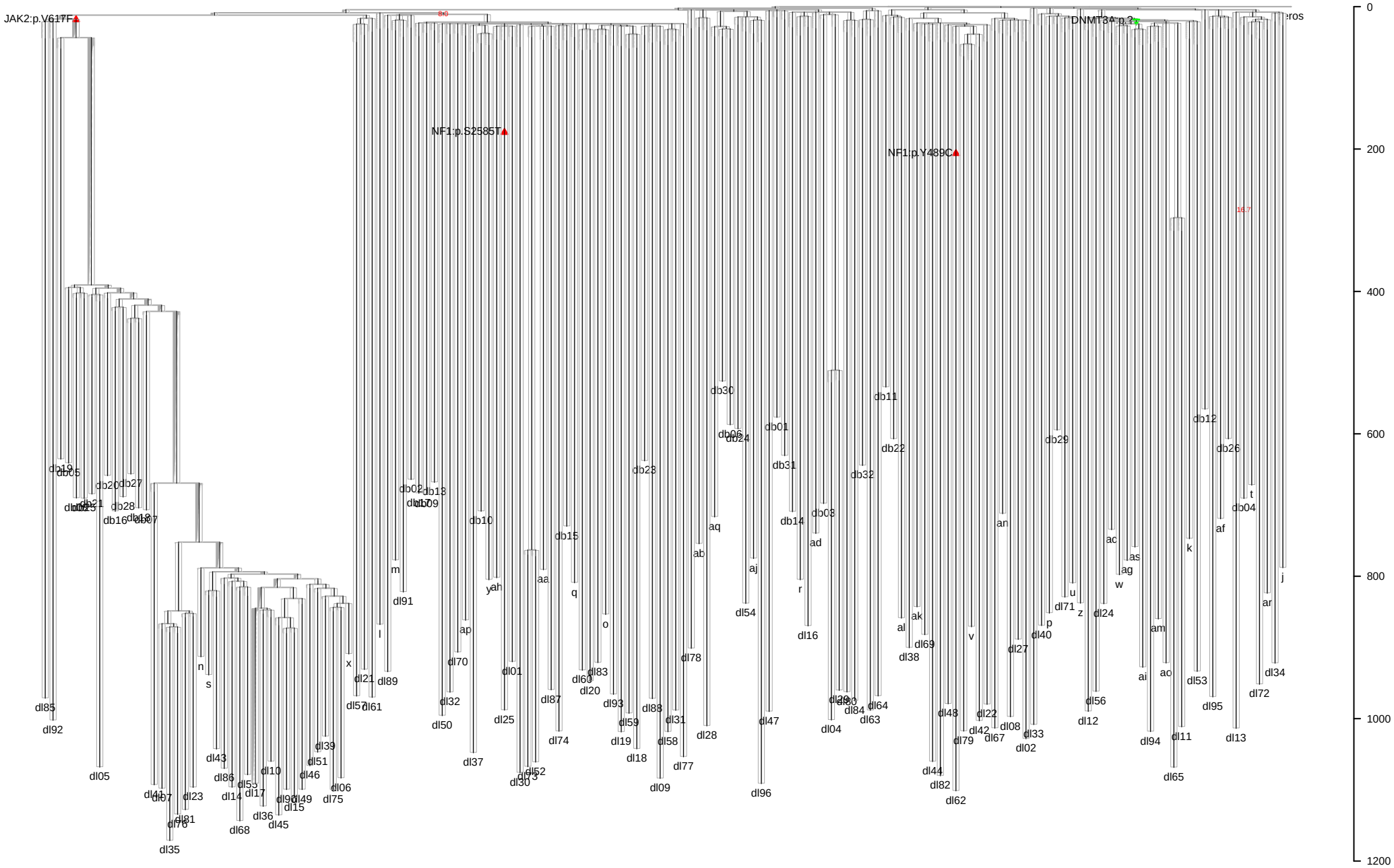
**PD5182: Annotated with VAF from dl68**
**Mean Depth=20.82**



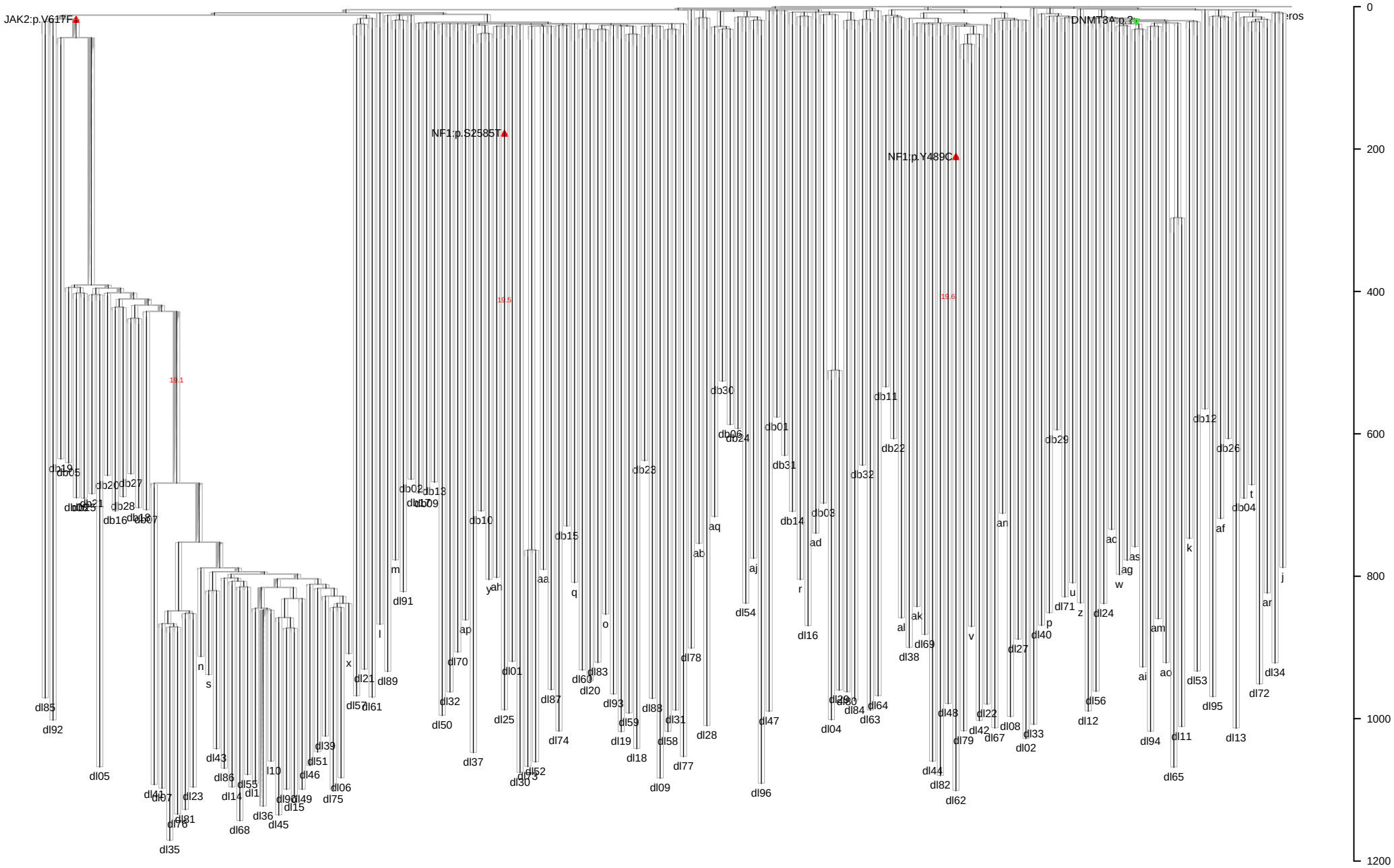
**PD5182: Annotated with VAF from dl55**
**Mean Depth=18.16**



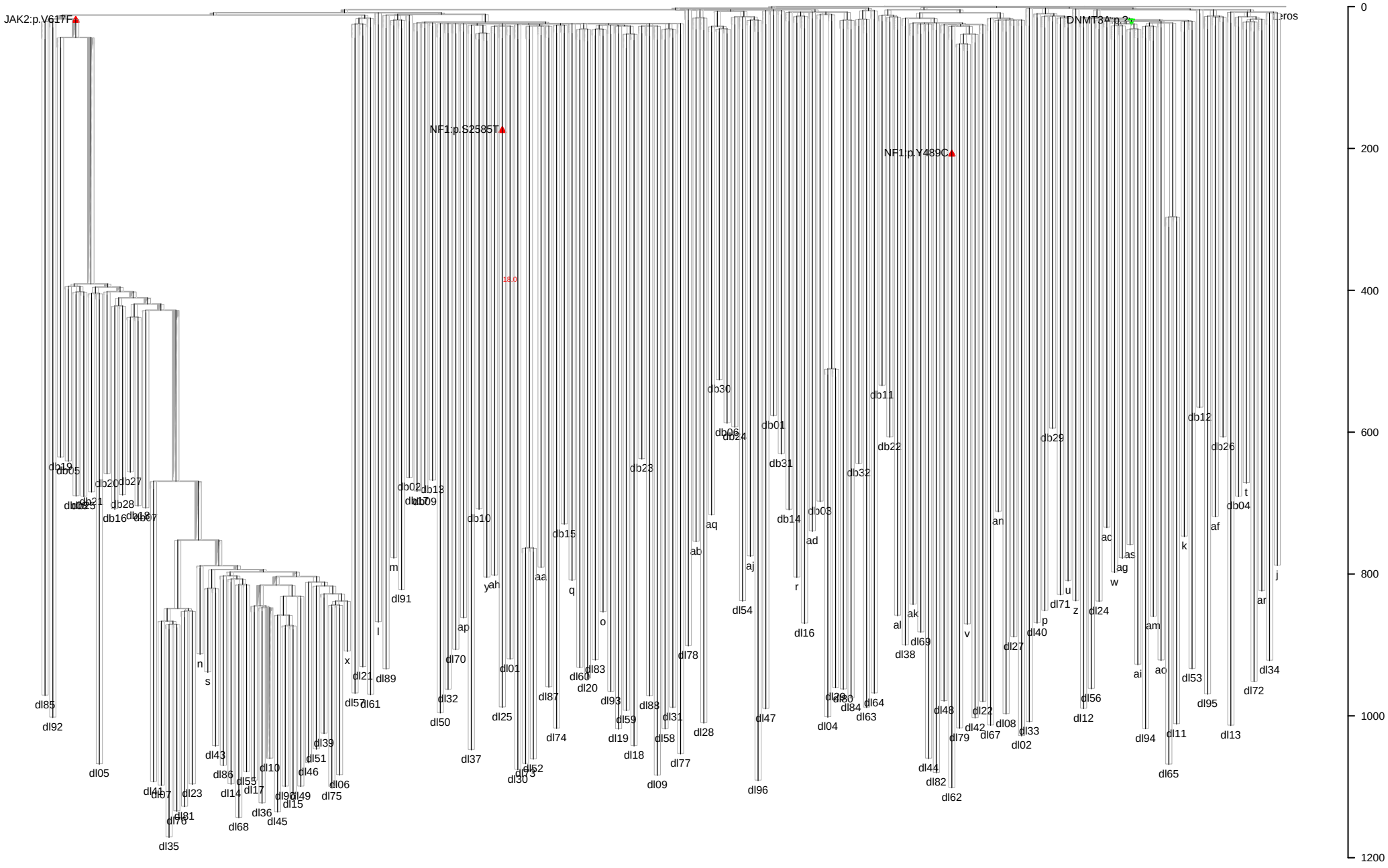
**PD5182: Annotated with VAF from dl17**
**Mean Depth=17.32**



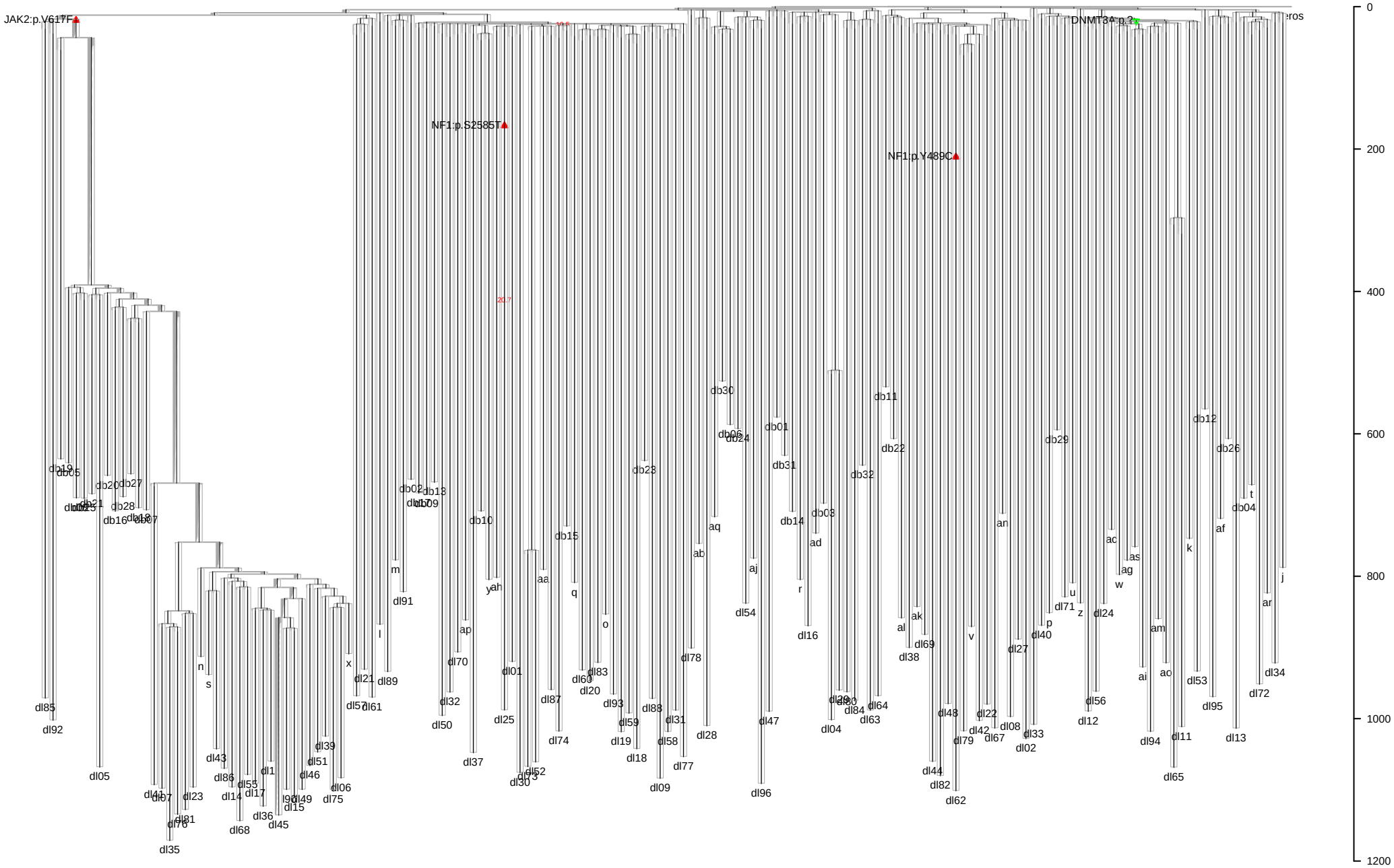
**PD5182: Annotated with VAF from dl36**
**Mean Depth=20.10**



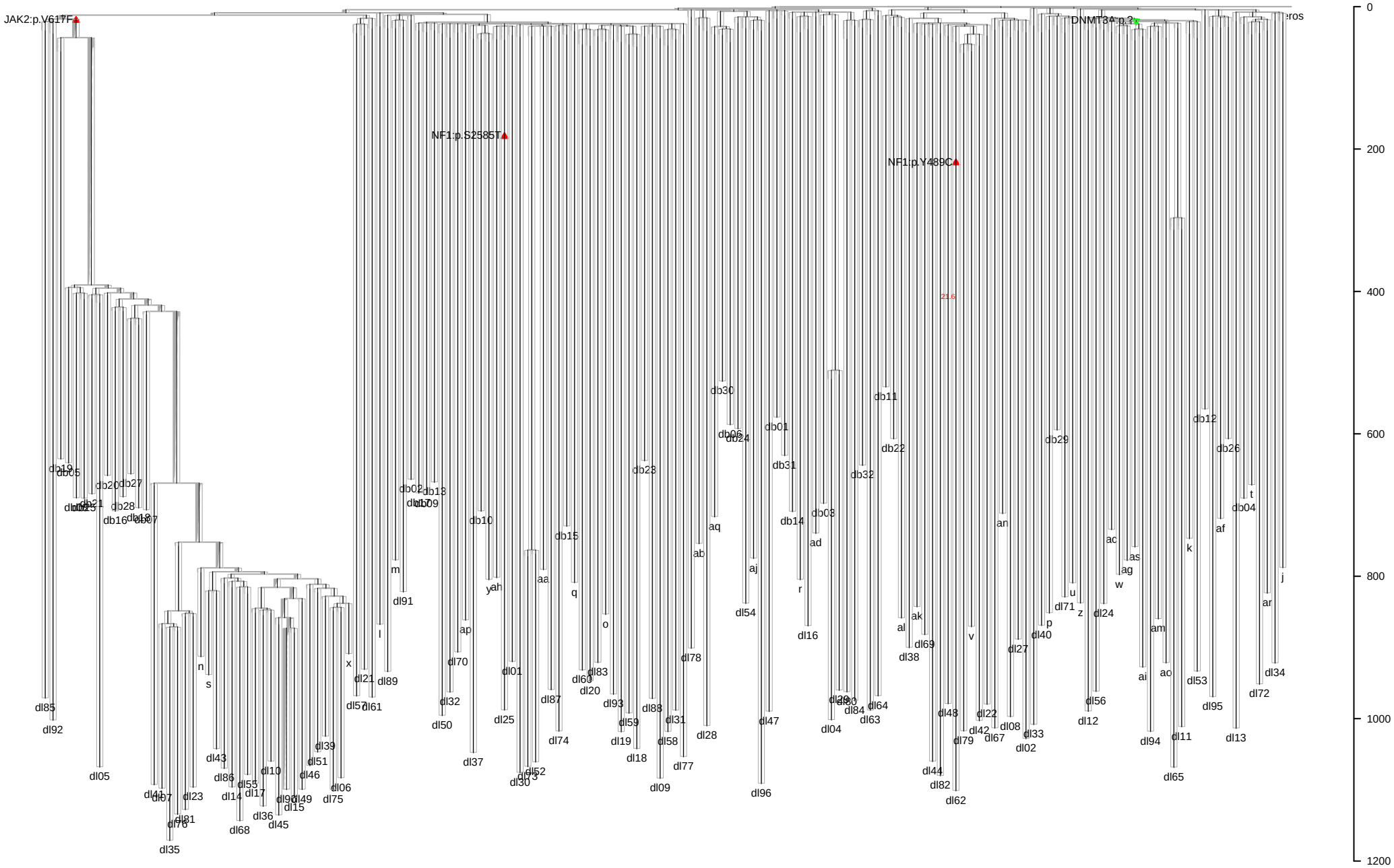
**PD5182: Annotated with VAF from dl10**
**Mean Depth=18.48**



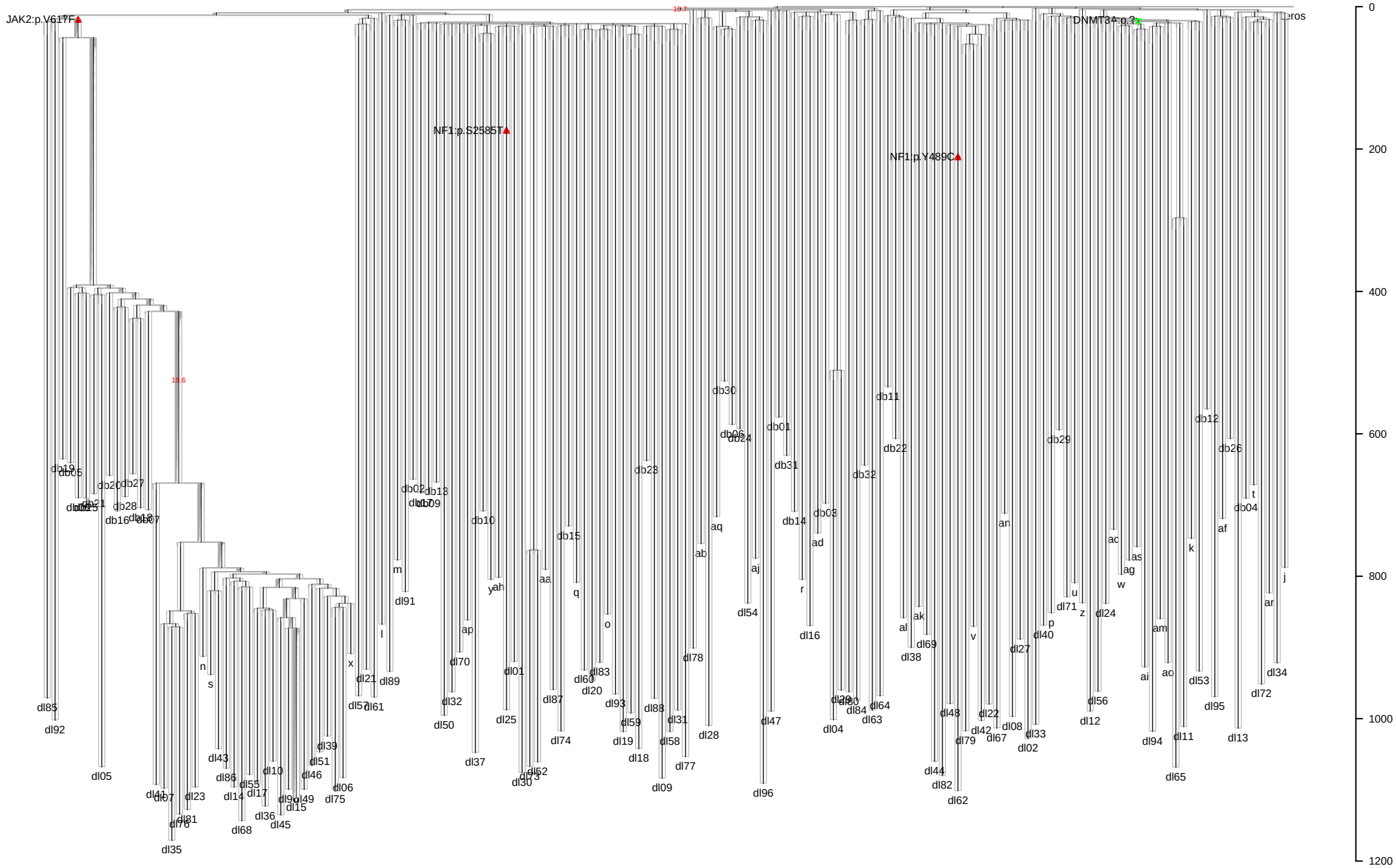
**PD5182: Annotated with VAF from dl45**
**Mean Depth=21.21**



**PD5182: Annotated with VAF from dl90**
**Mean Depth=22.09**



**PD5182: Annotated with VAF from dl15**
**Mean Depth=19.42**



**PD5182: Annotated with VAF from dl49**
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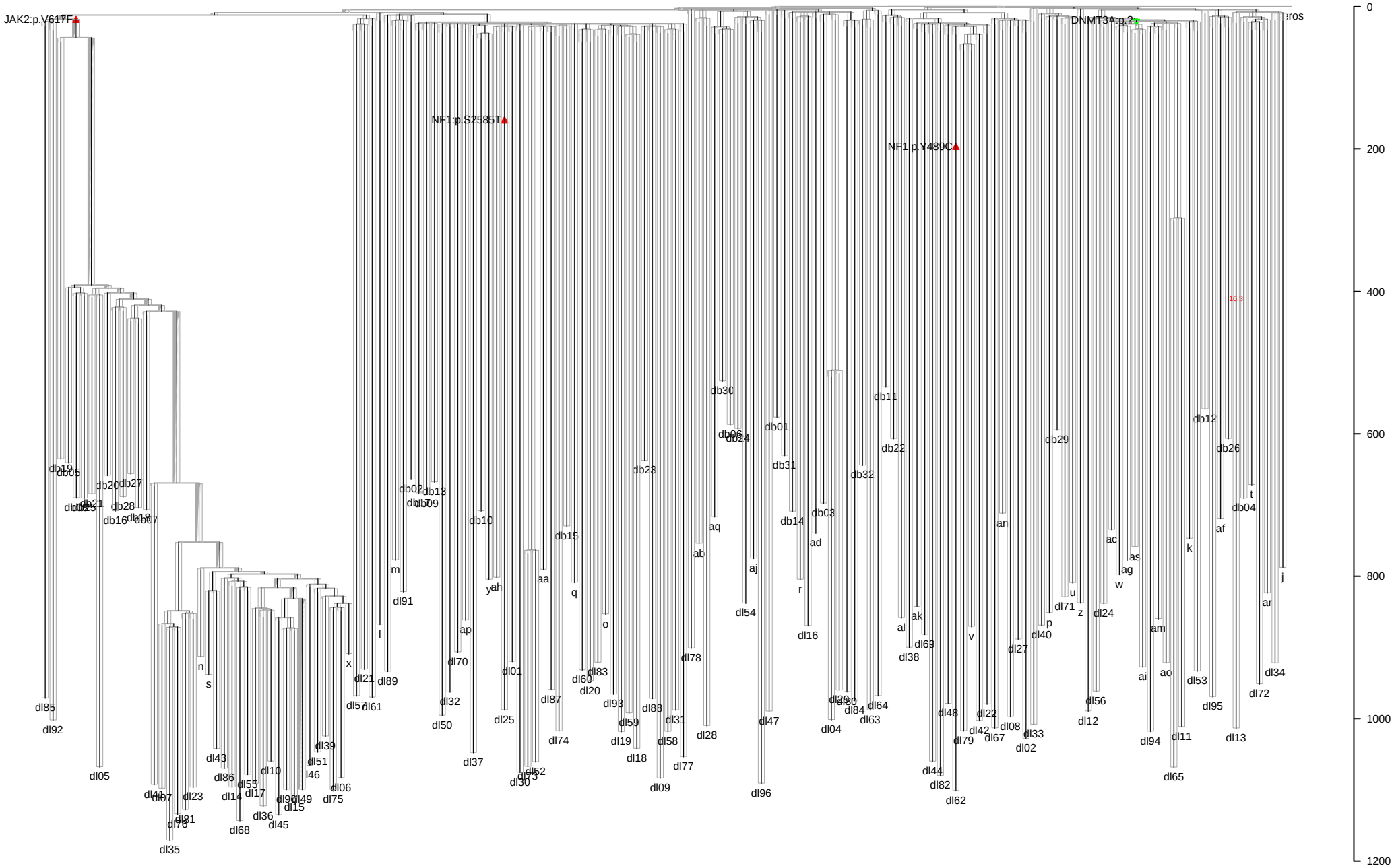

**PD5182: Annotated with VAF from dl46**
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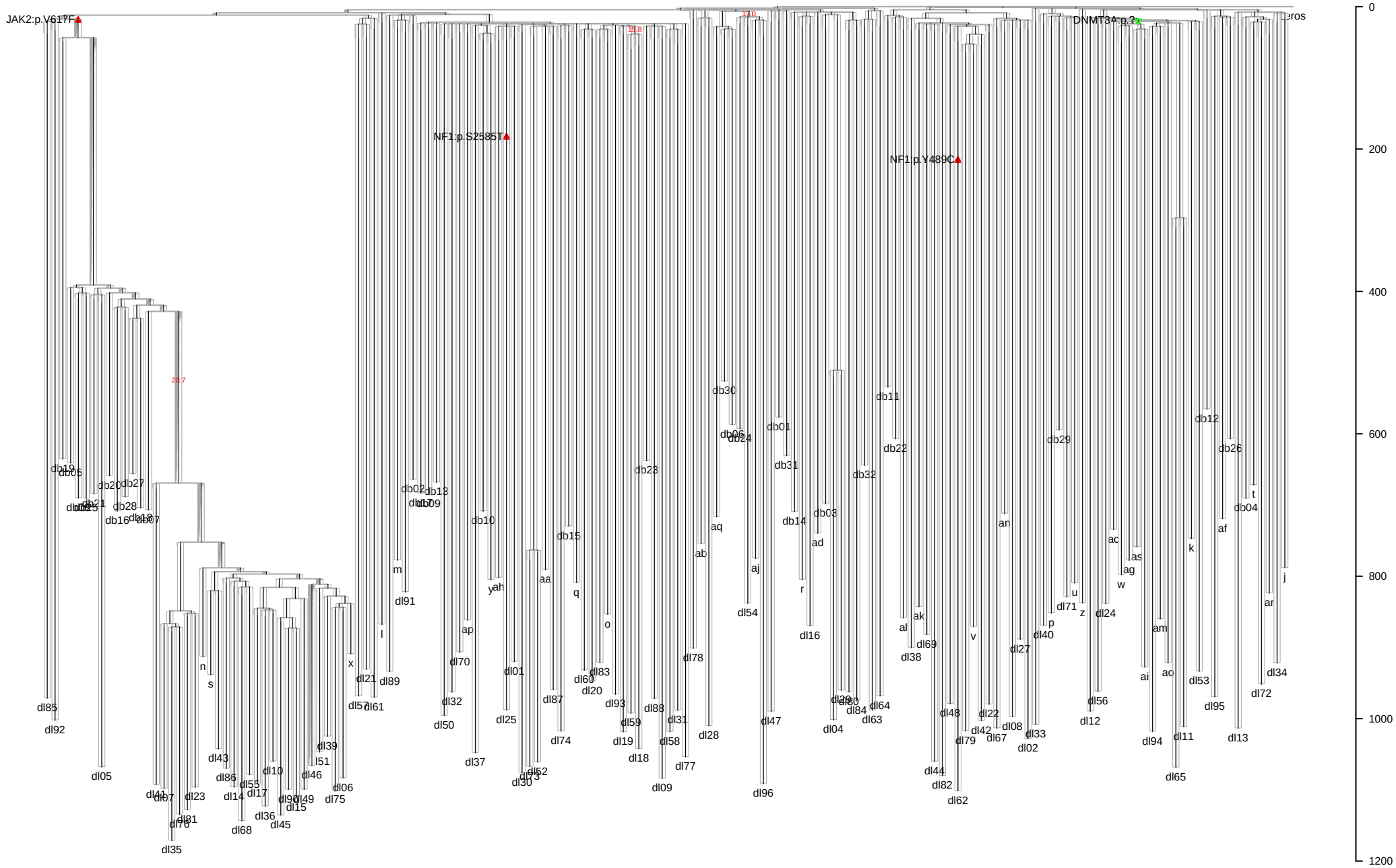

**PD5182: Annotated with VAF from dl51**
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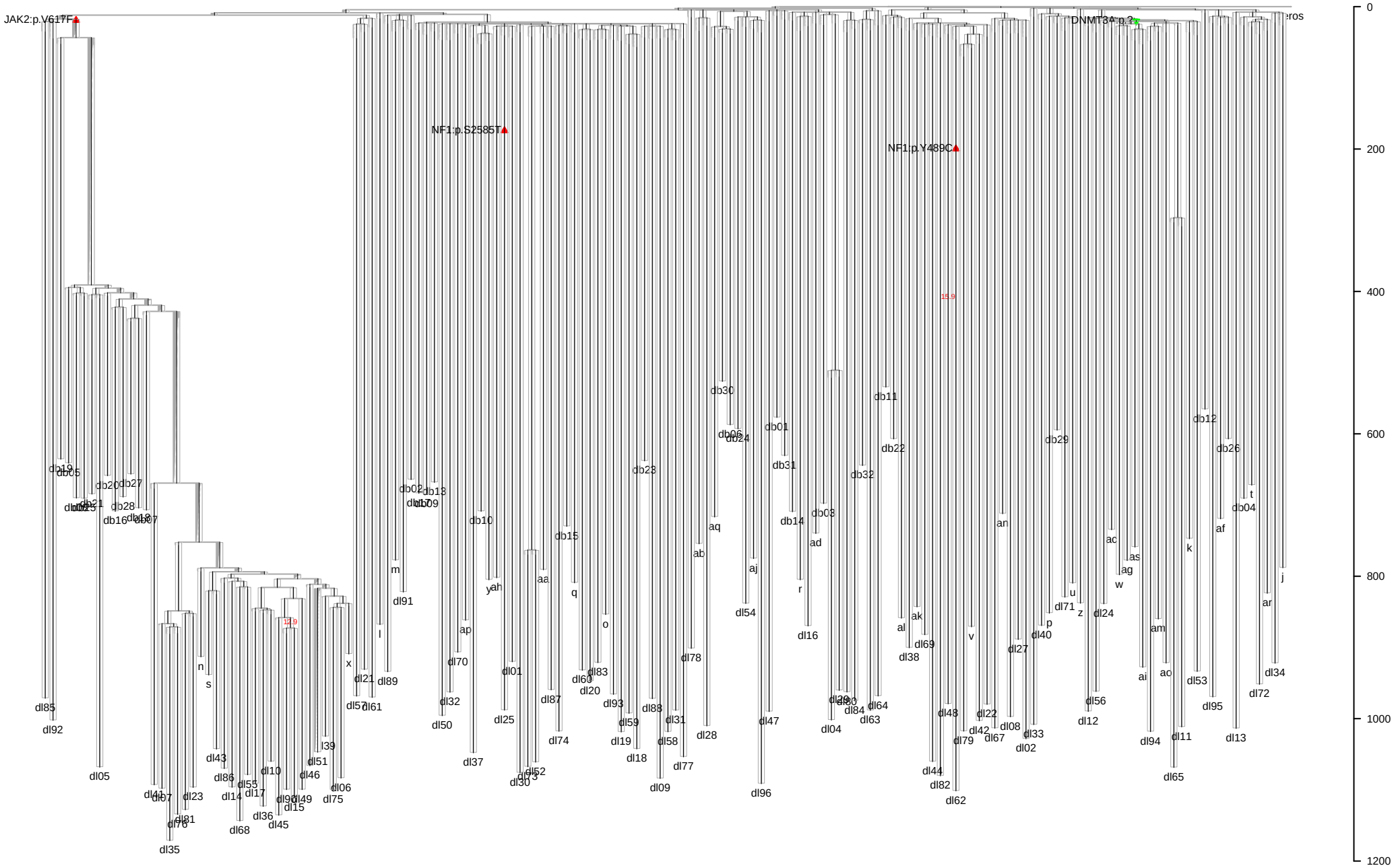

**PD5182: Annotated with VAF from dl39**
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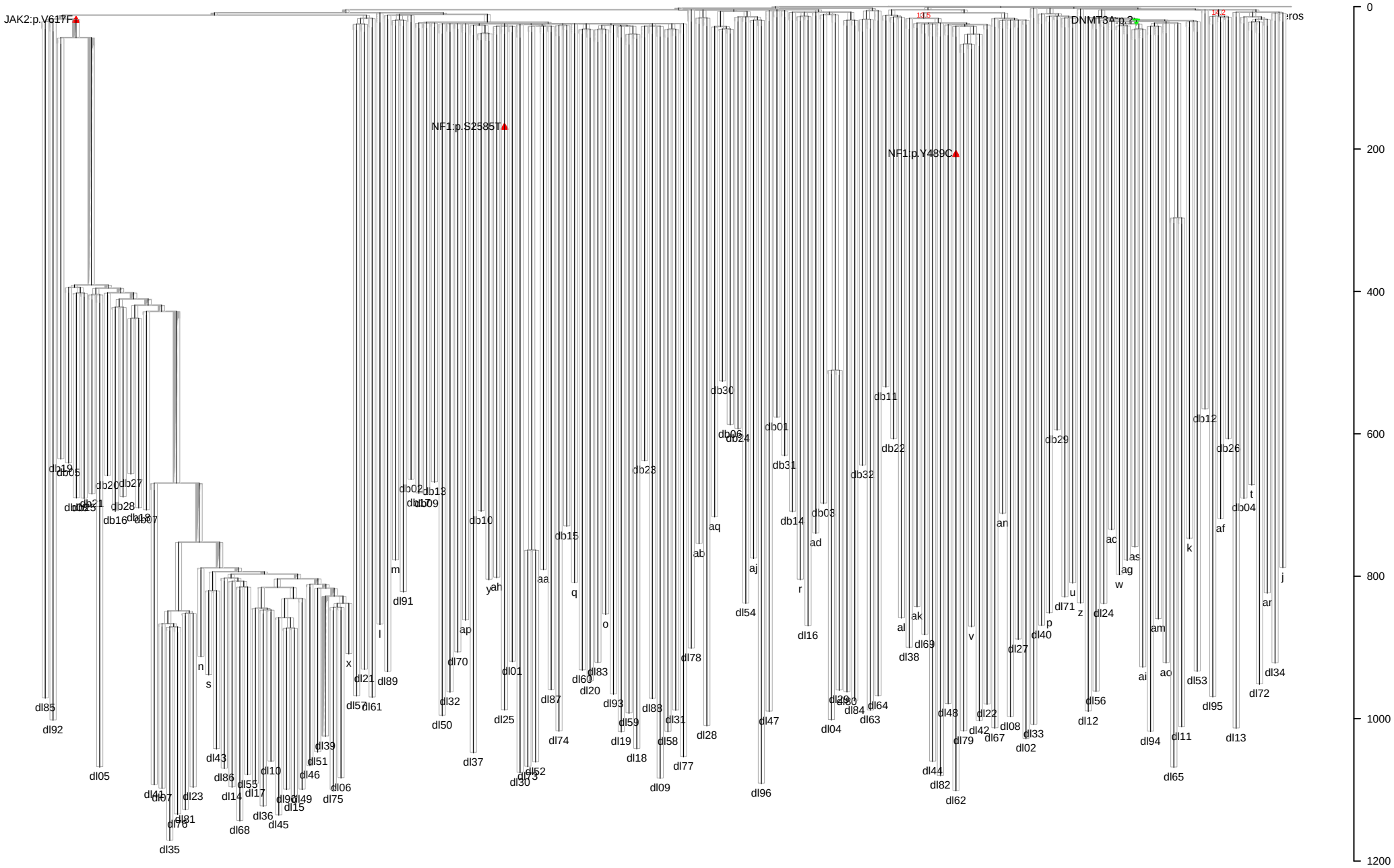

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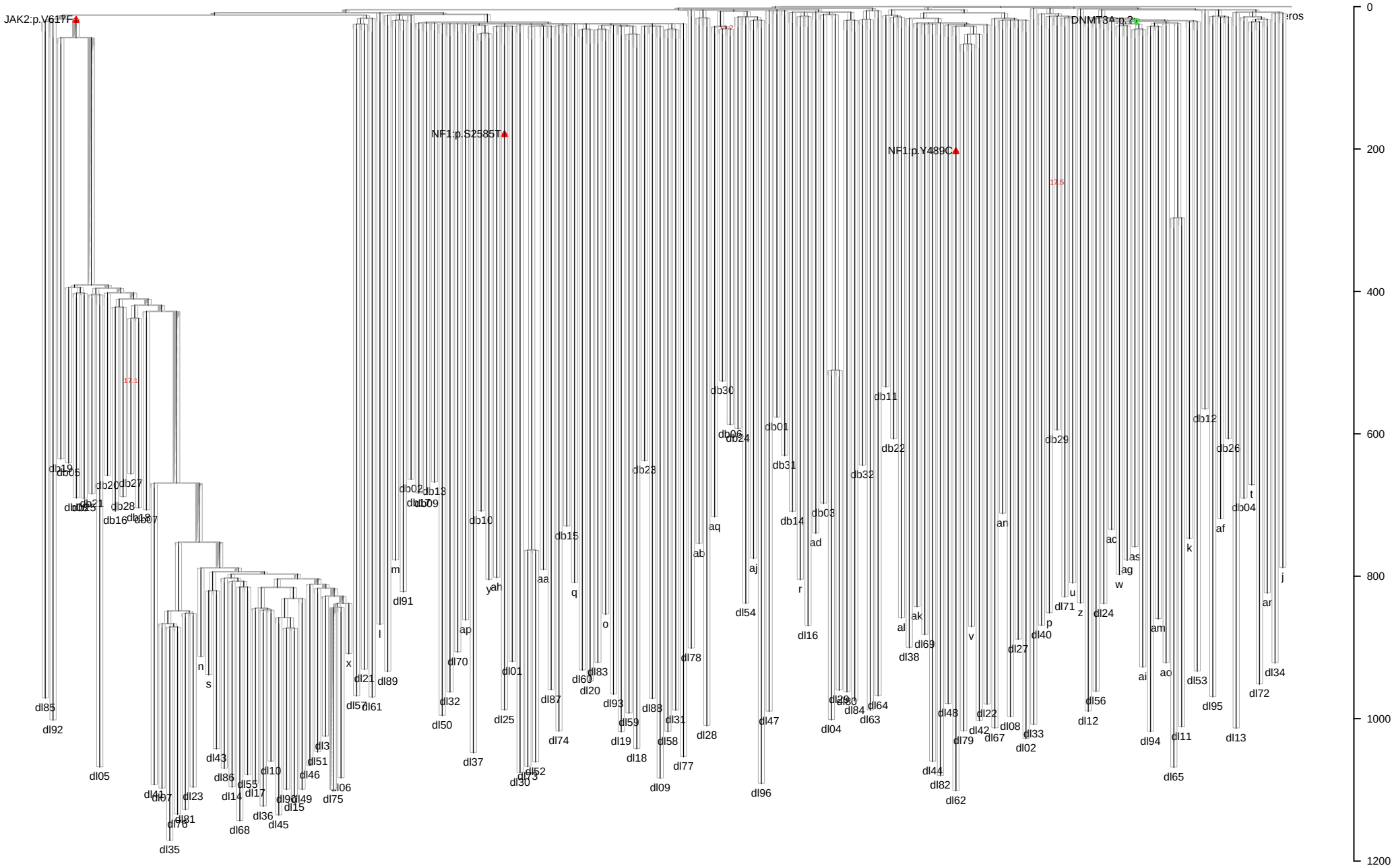
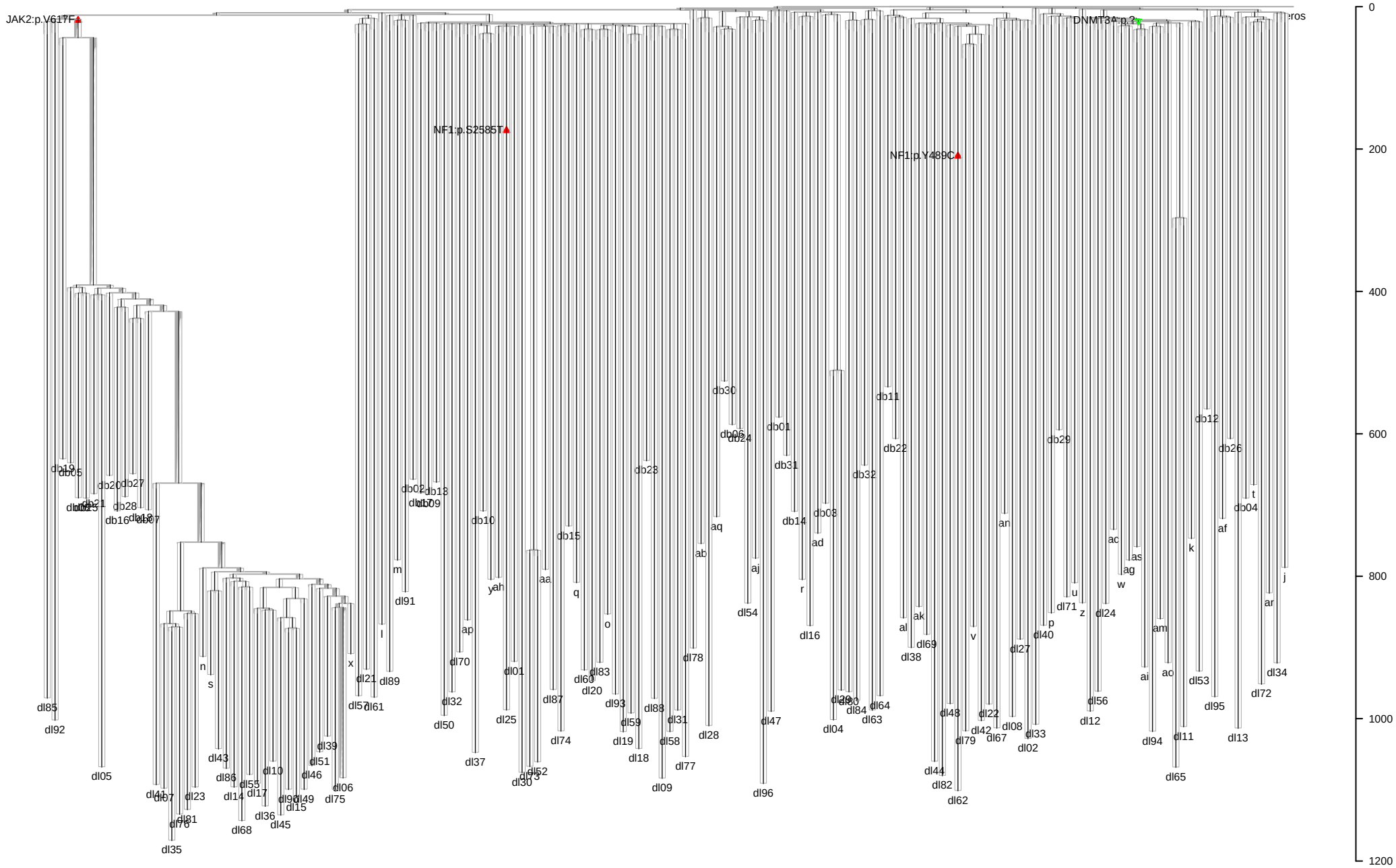
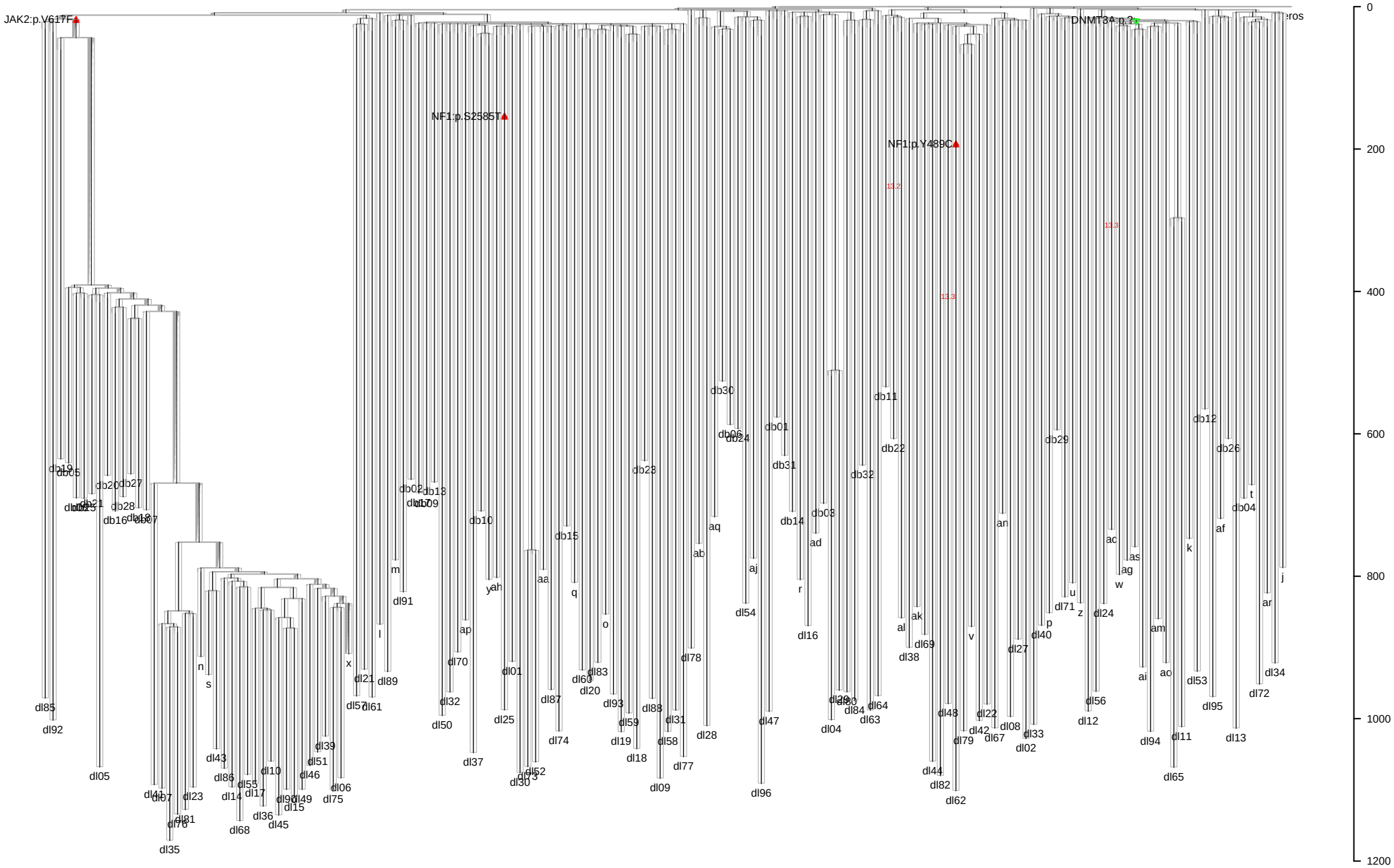


**PD5182: Annotated with VAF from dl06**
**Mean Depth=21.79**



**PD5182: Annotated with VAF from x**
**Mean Depth=13.72**



**PD5182: Annotated with VAF from dl57**
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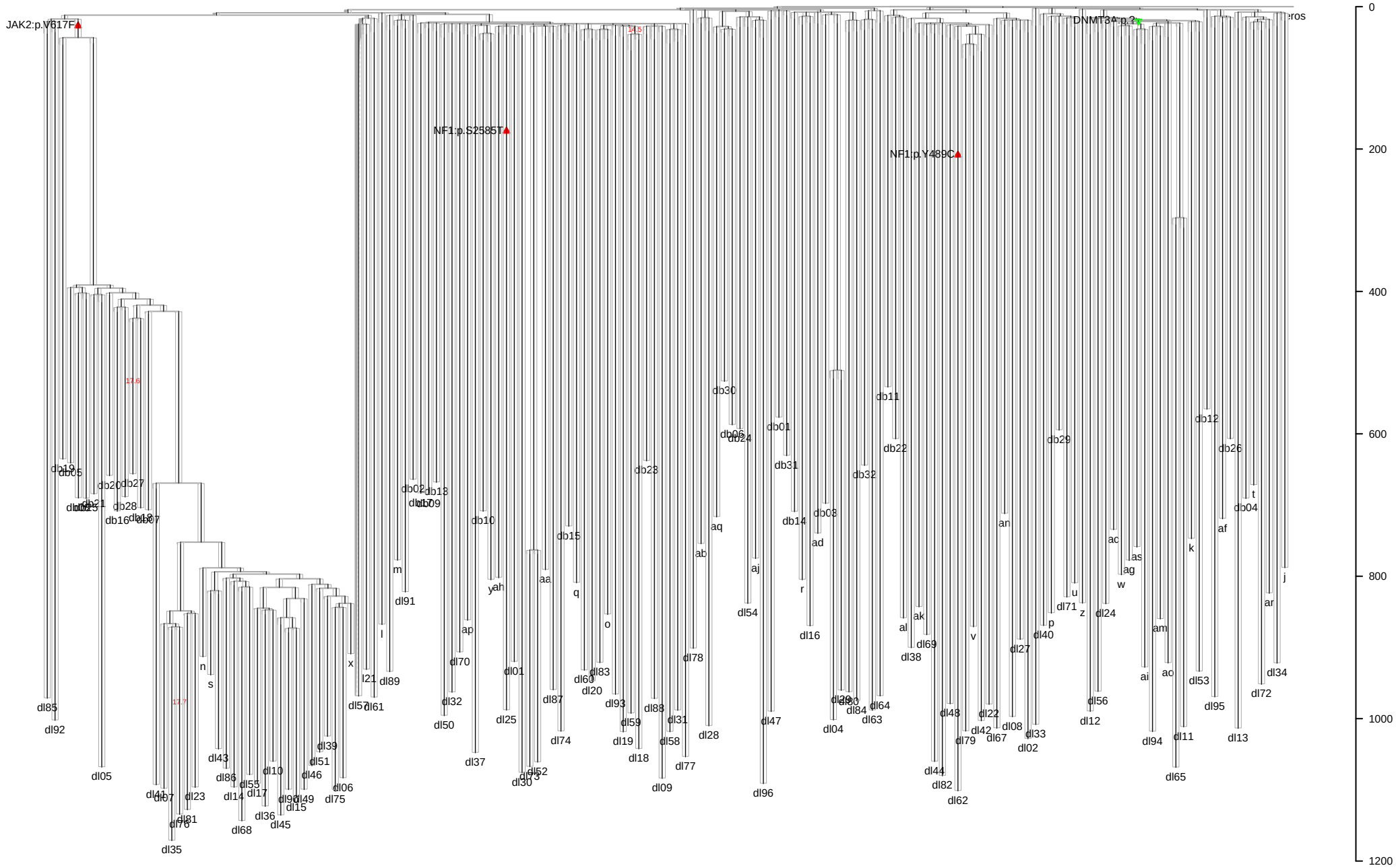
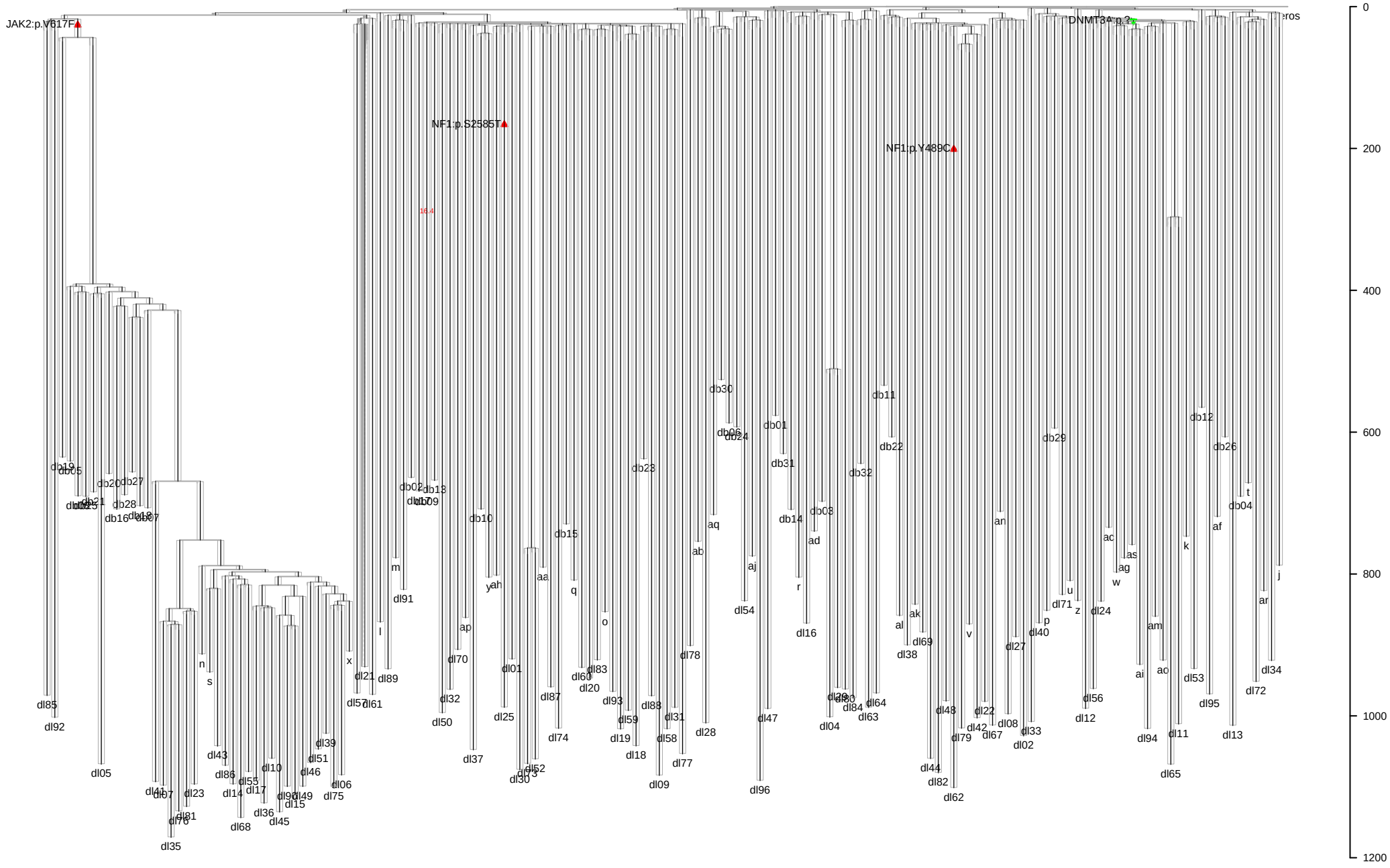
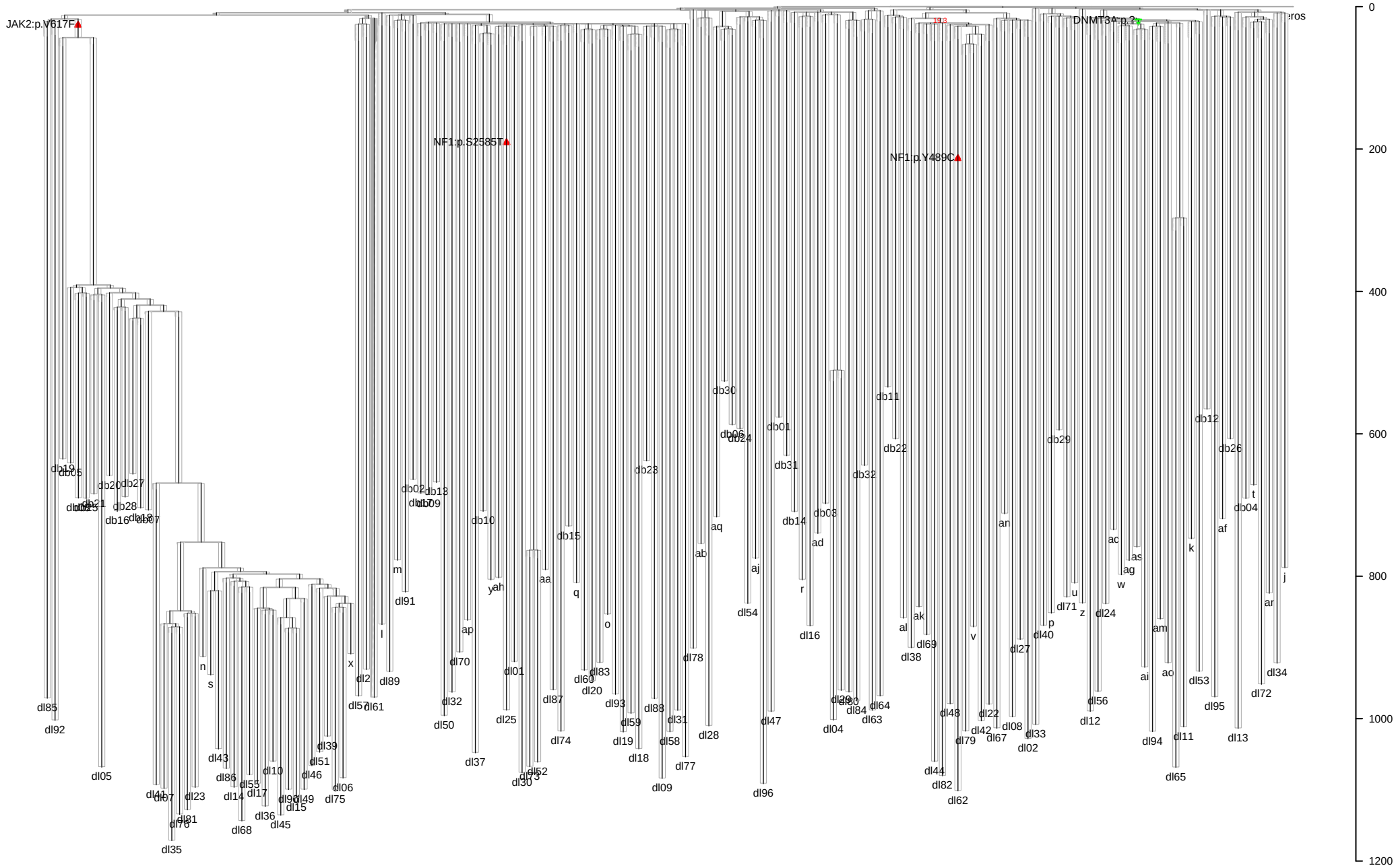


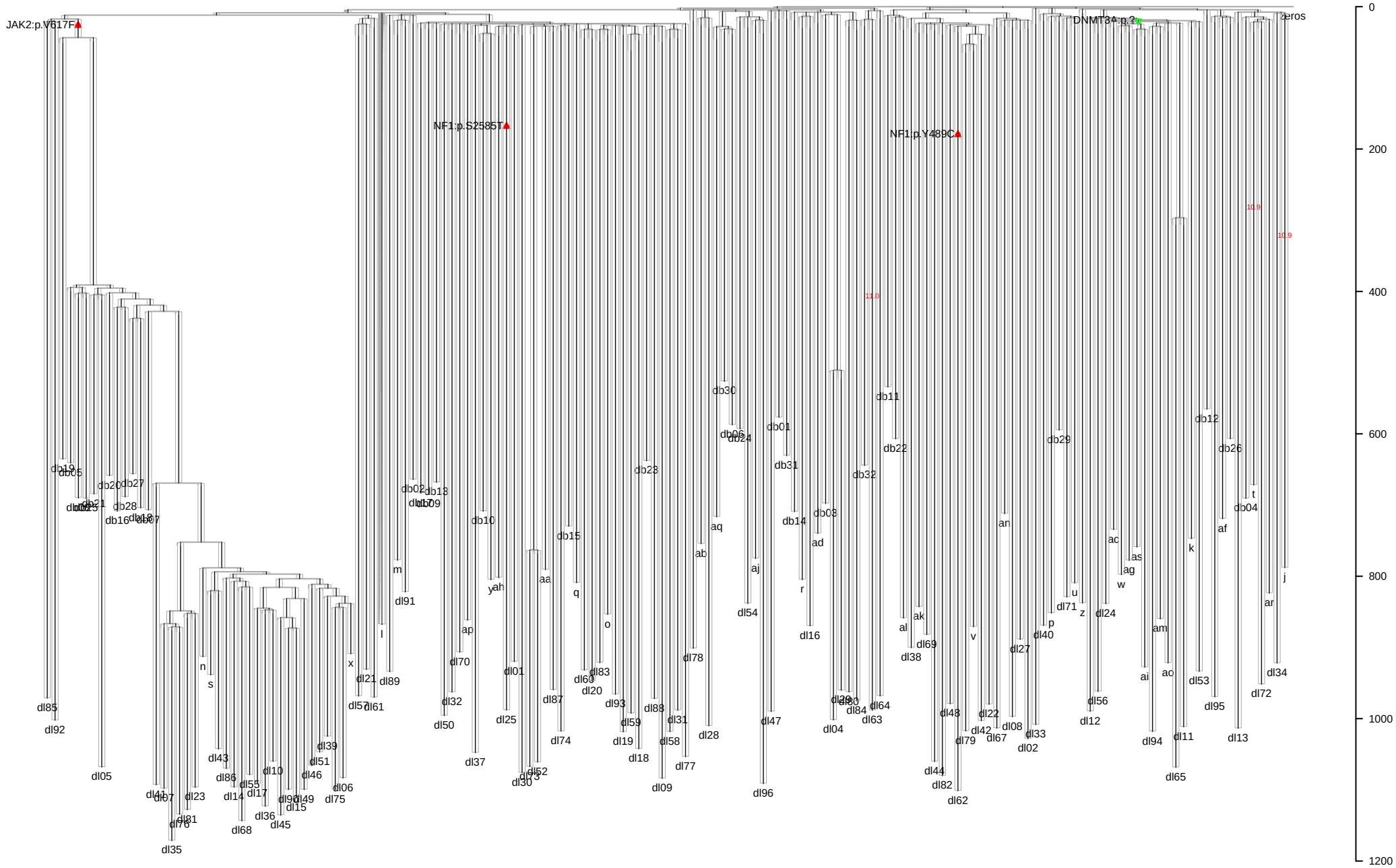
**PD5182: Annotated with VAF from dl21**
**Mean Depth=16.93**



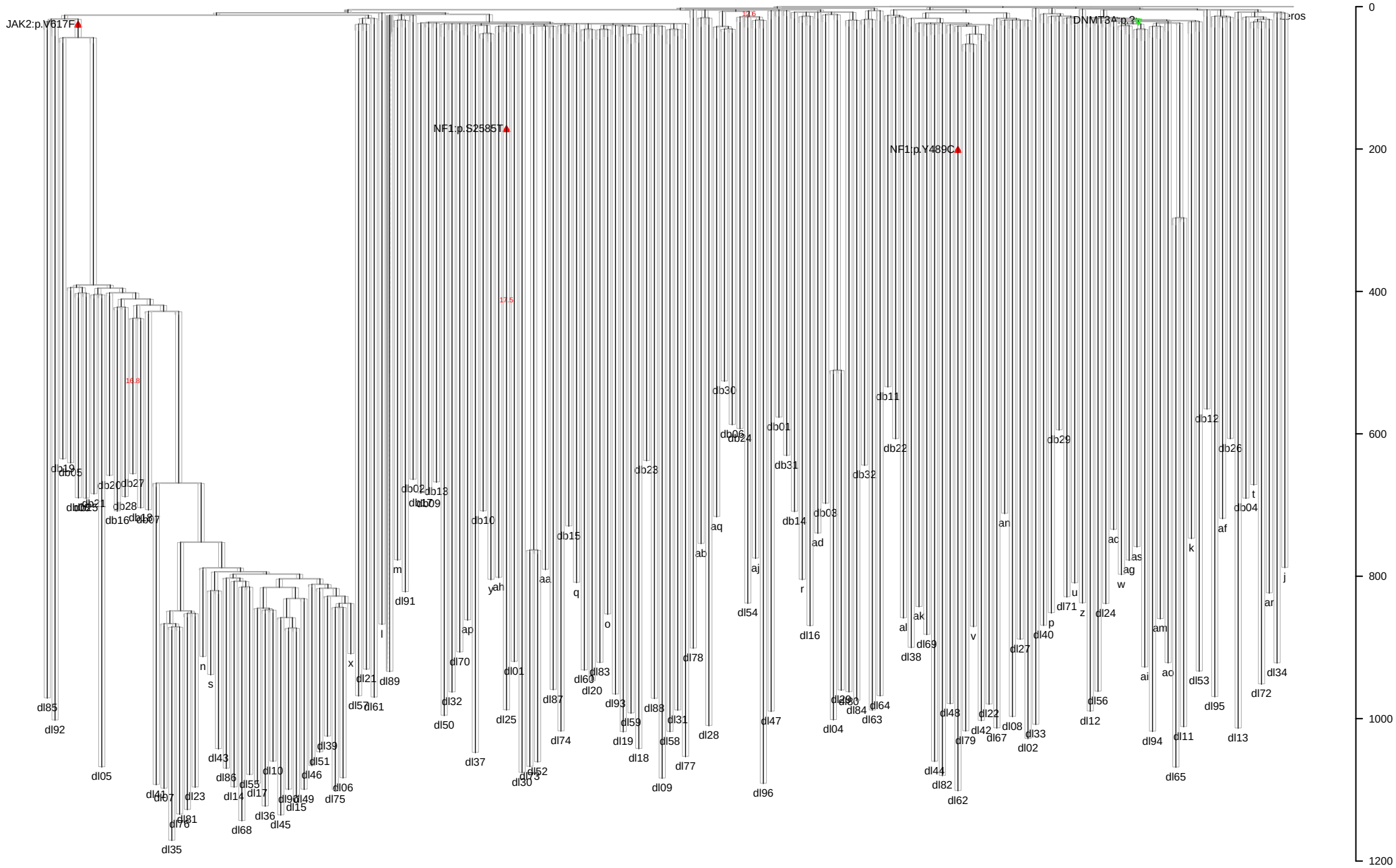
**PD5182: Annotated with VAF from dl61**
**Mean Depth=25.14**



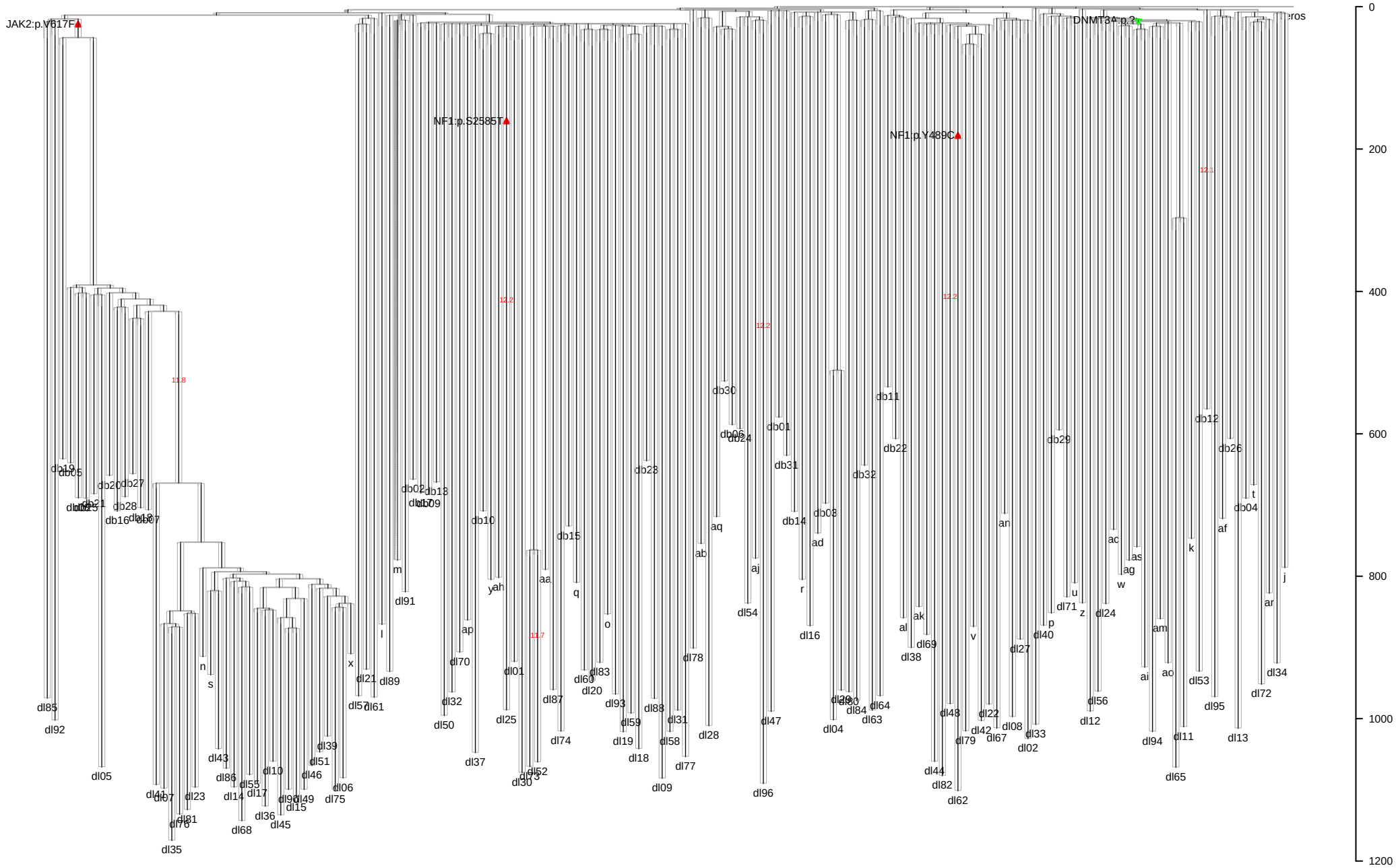
**PD5182: Annotated with VAF from l**
**Mean Depth=11.31**



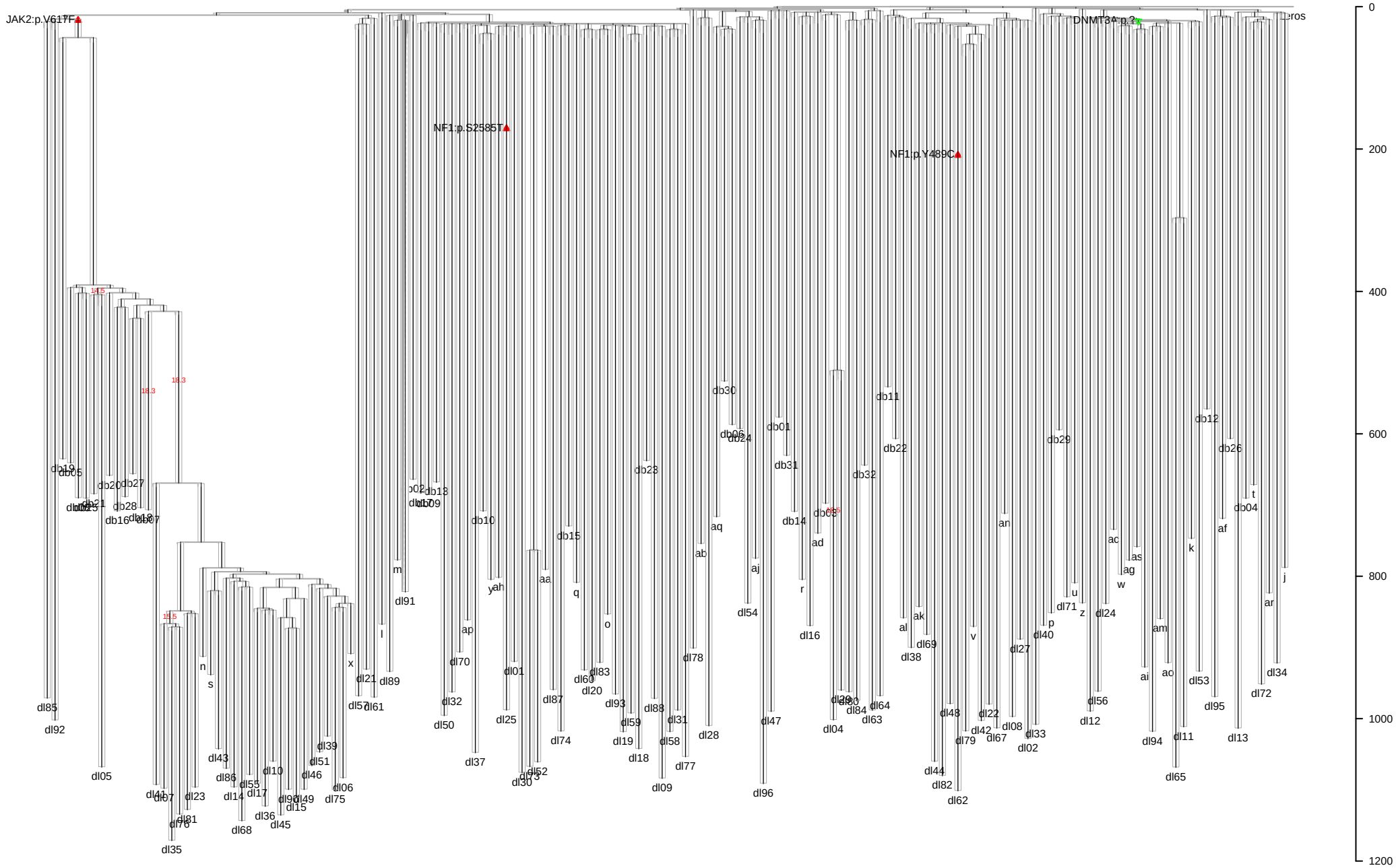
**PD5182: Annotated with VAF from dl89**
**Mean Depth=18.01**



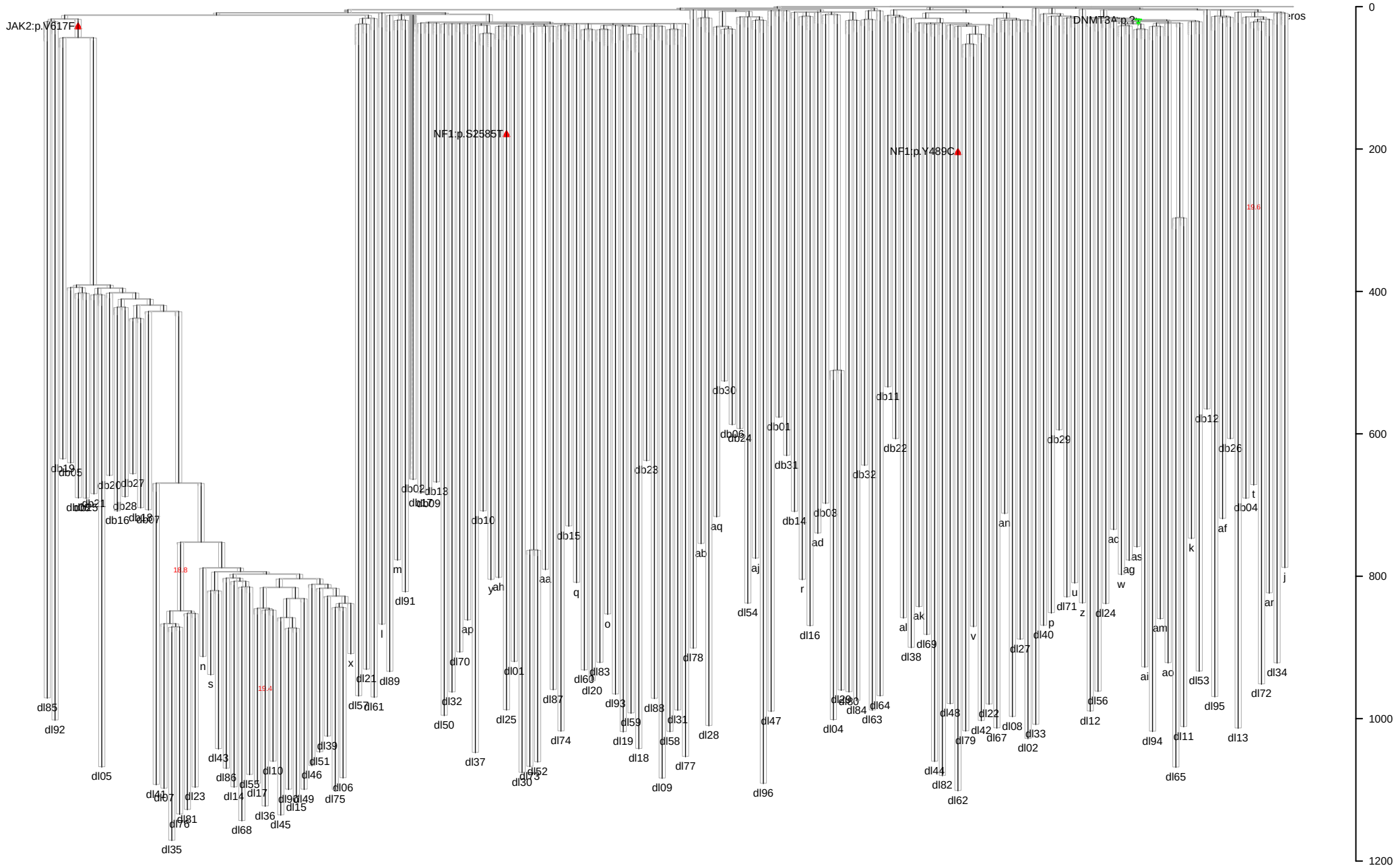
**PD5182: Annotated with VAF from m**
**Mean Depth=12.54**



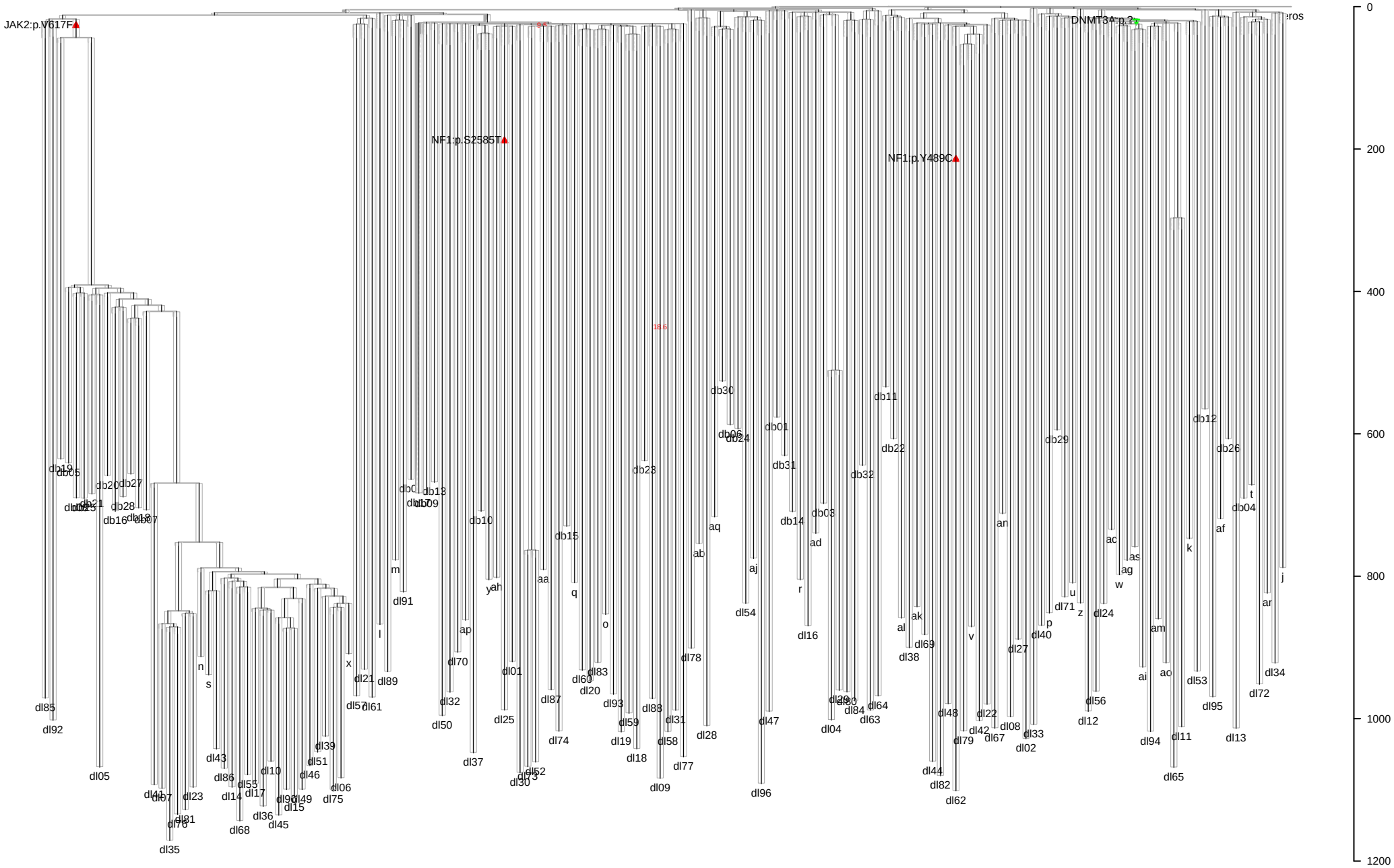
**PD5182: Annotated with VAF from dl91**
**Mean Depth=19.12**



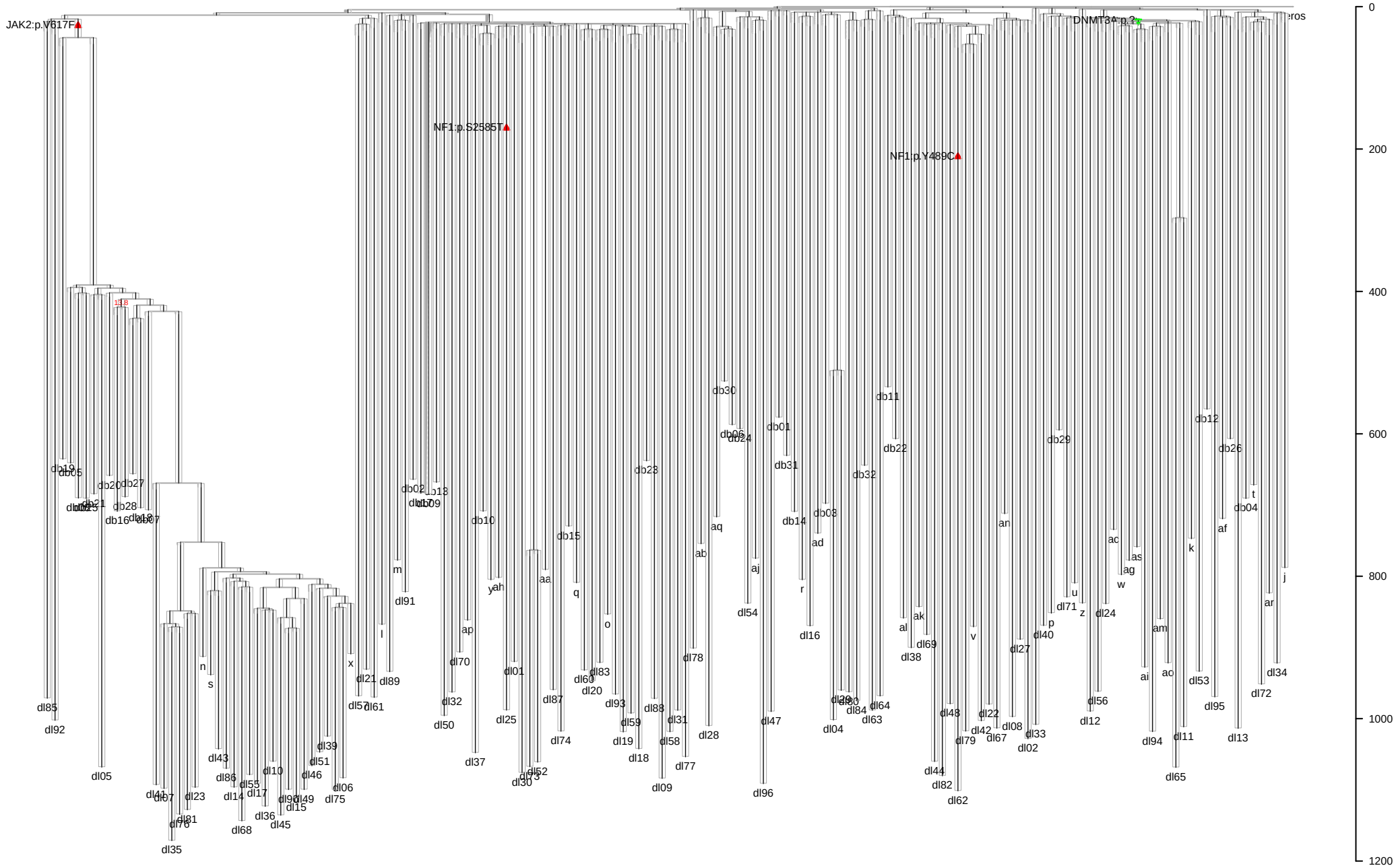
**PD5182: Annotated with VAF from db02**
**Mean Depth=20.46**



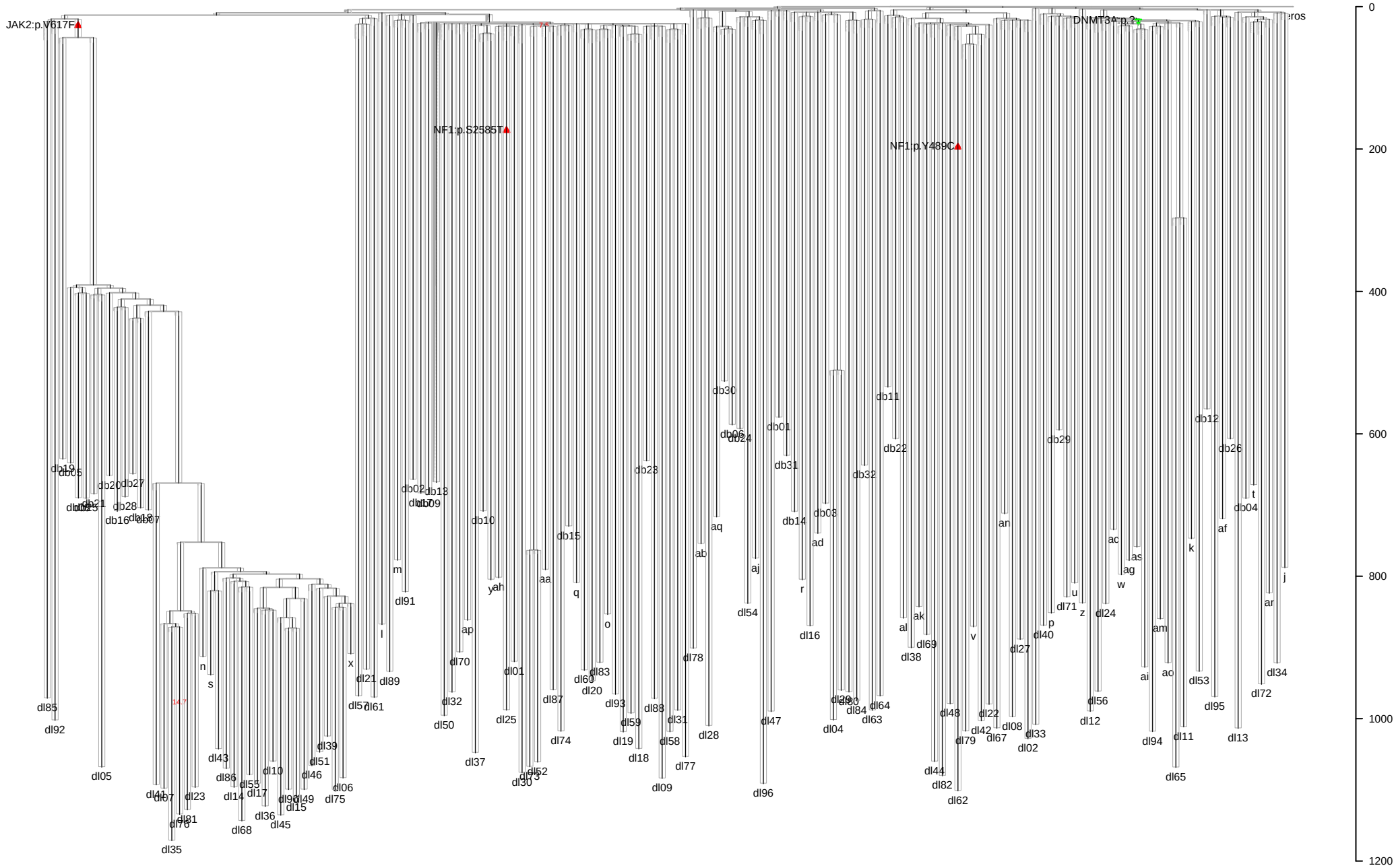
**PD5182: Annotated with VAF from db17**
**Mean Depth=19.02**



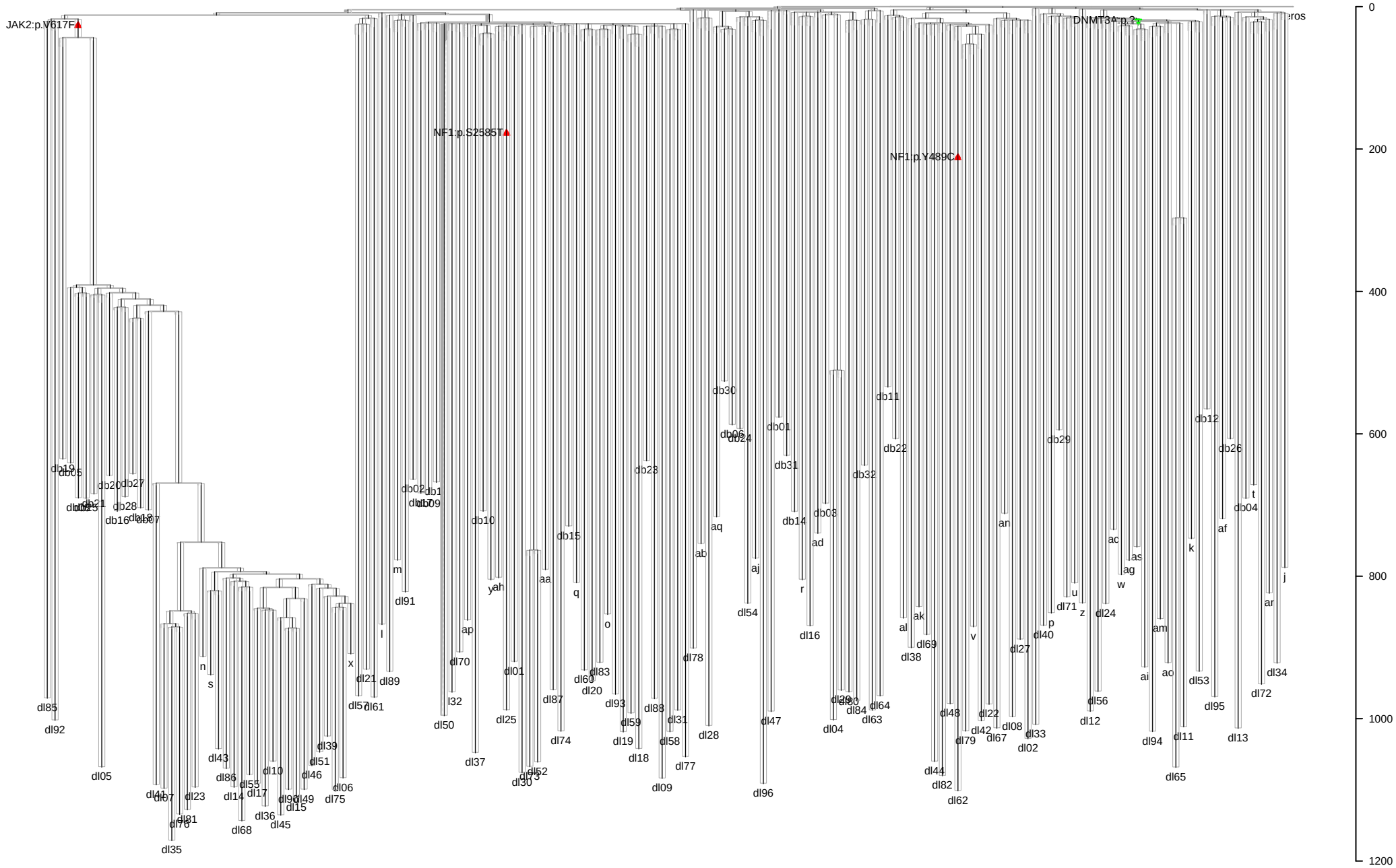
**PD5182: Annotated with VAF from db09**
**Mean Depth=18.25**



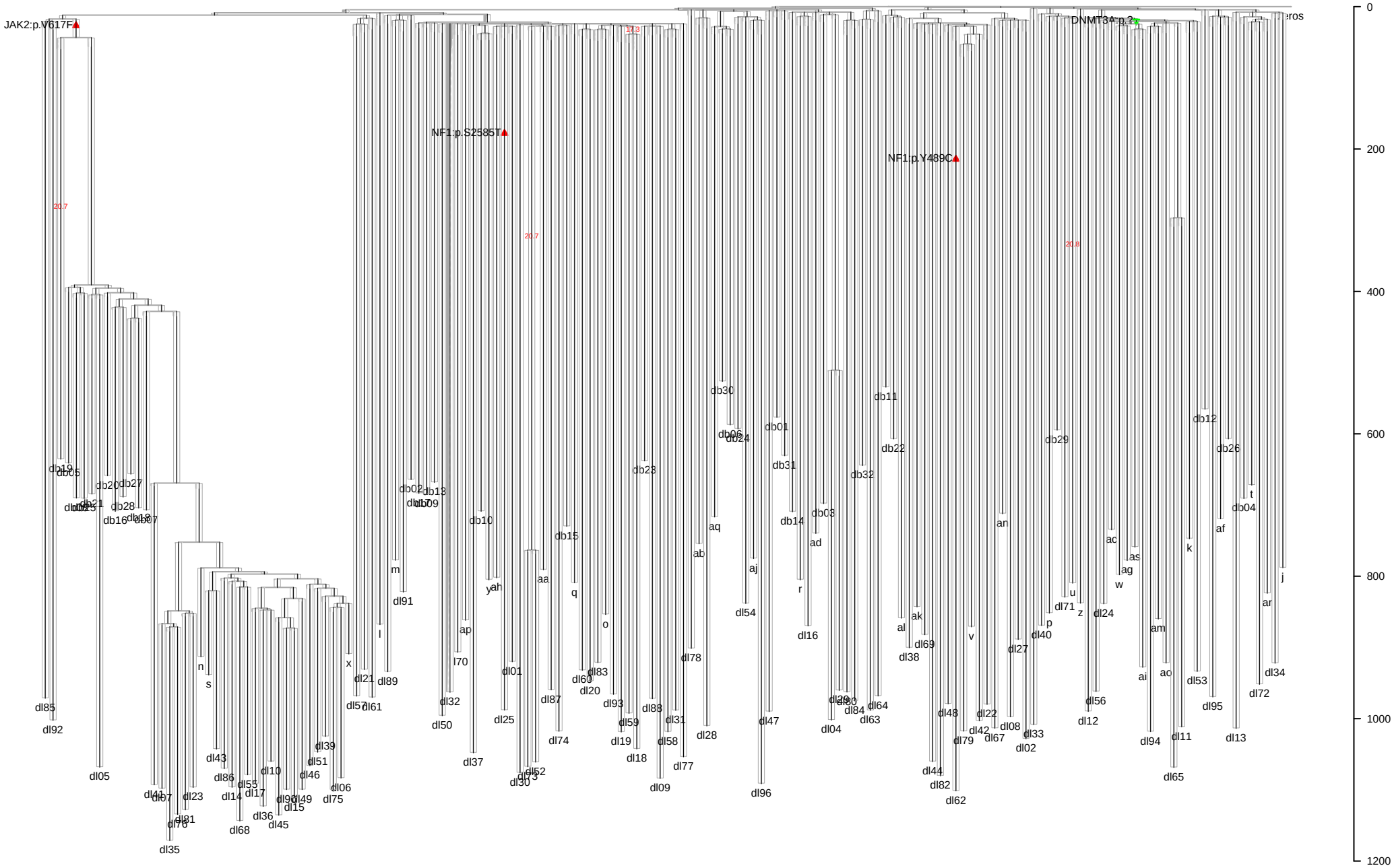
**PD5182: Annotated with VAF from db13**
**Mean Depth=15.42**



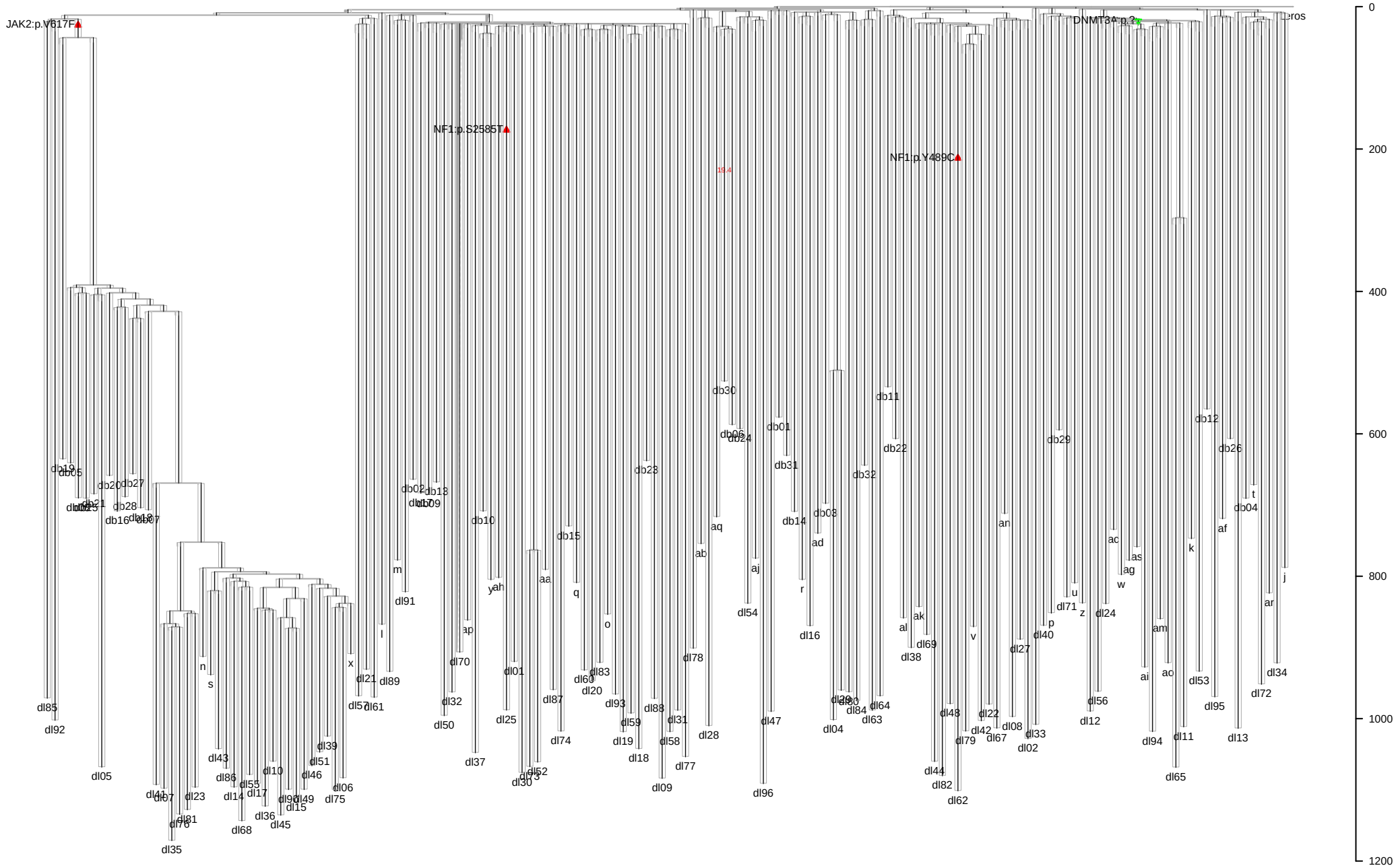
**PD5182: Annotated with VAF from dl50**
**Mean Depth=19.20**



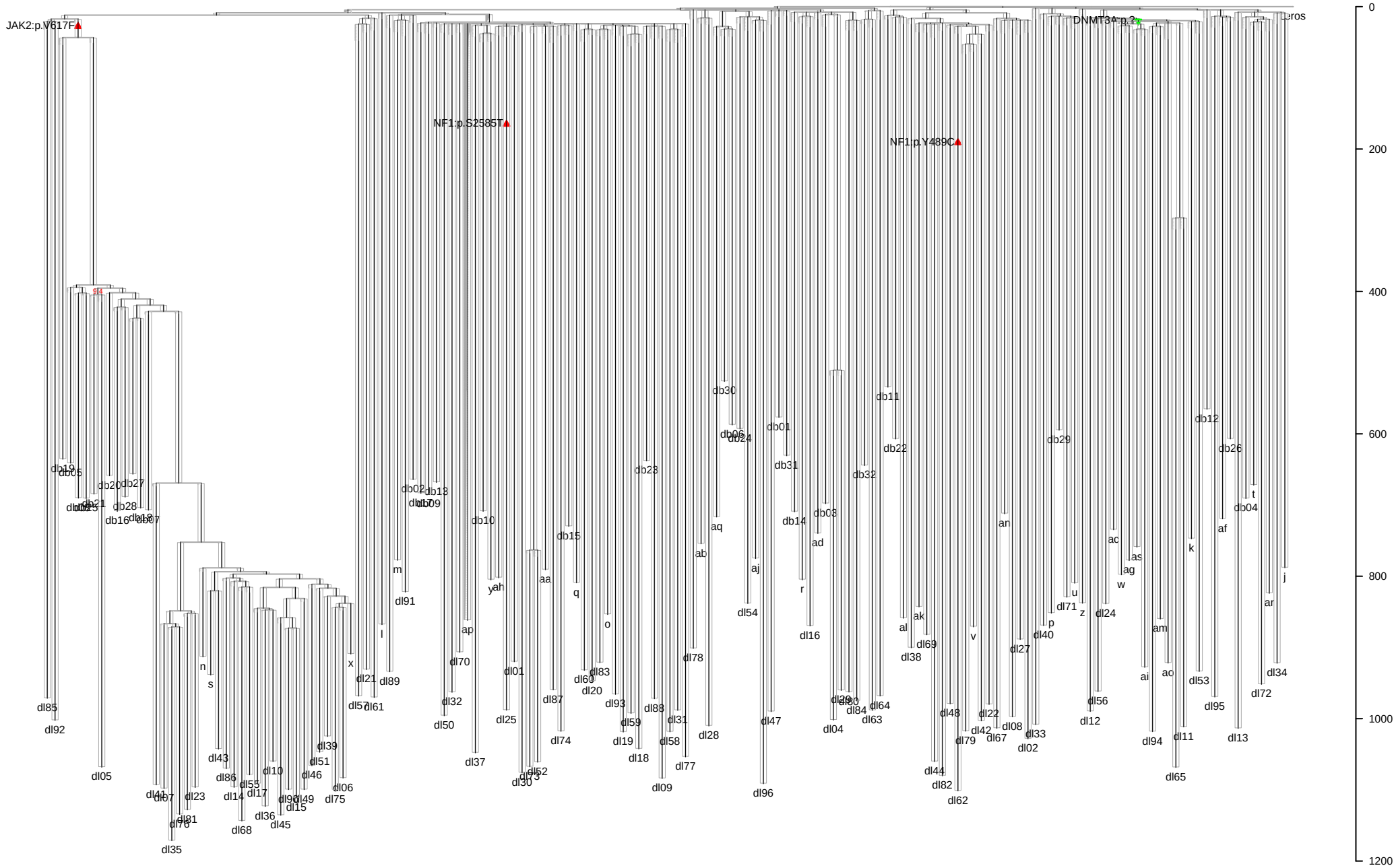
**PD5182: Annotated with VAF from dl32**
**Mean Depth=21.38**



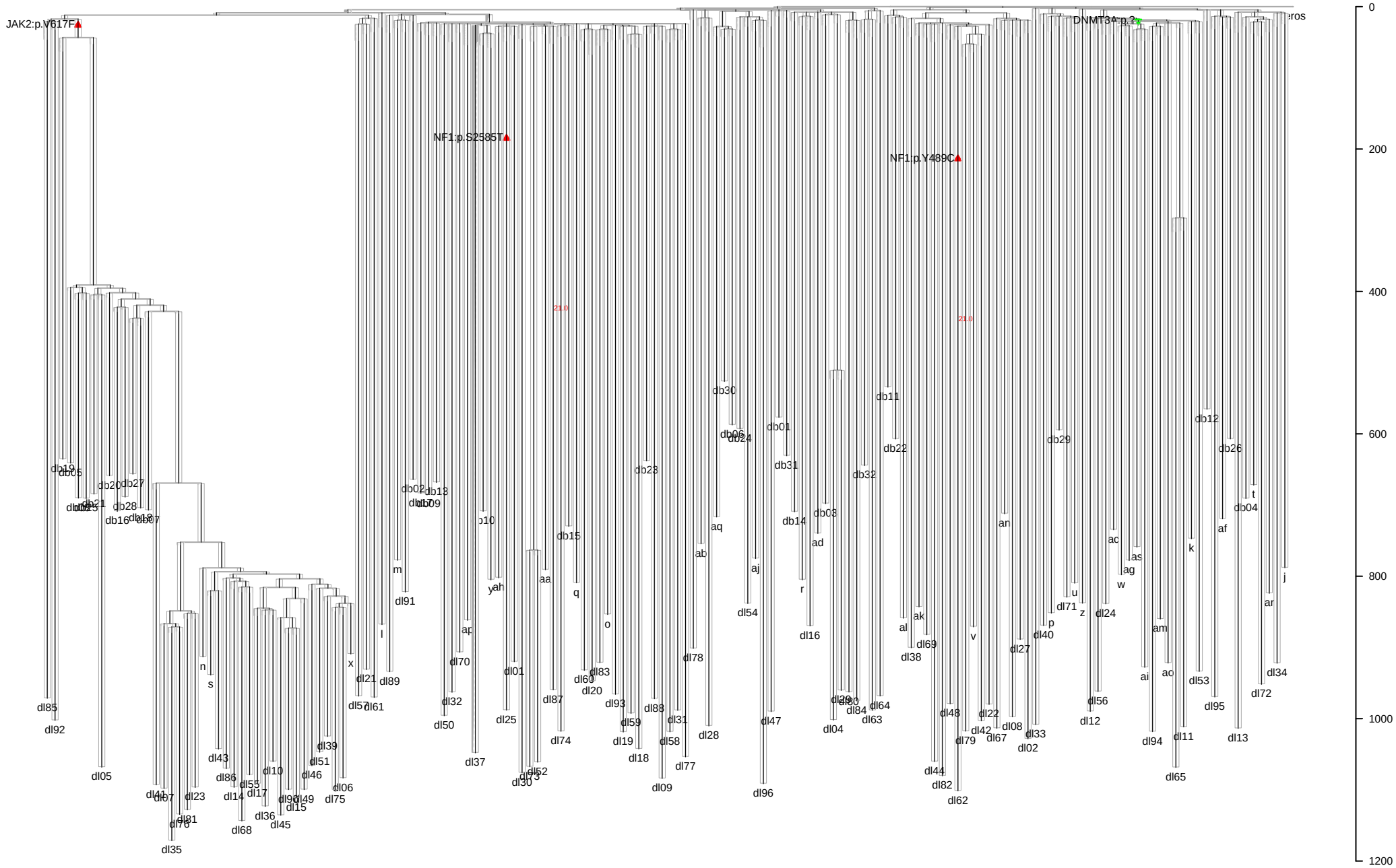
**PD5182: Annotated with VAF from dl70**
**Mean Depth=20.03**



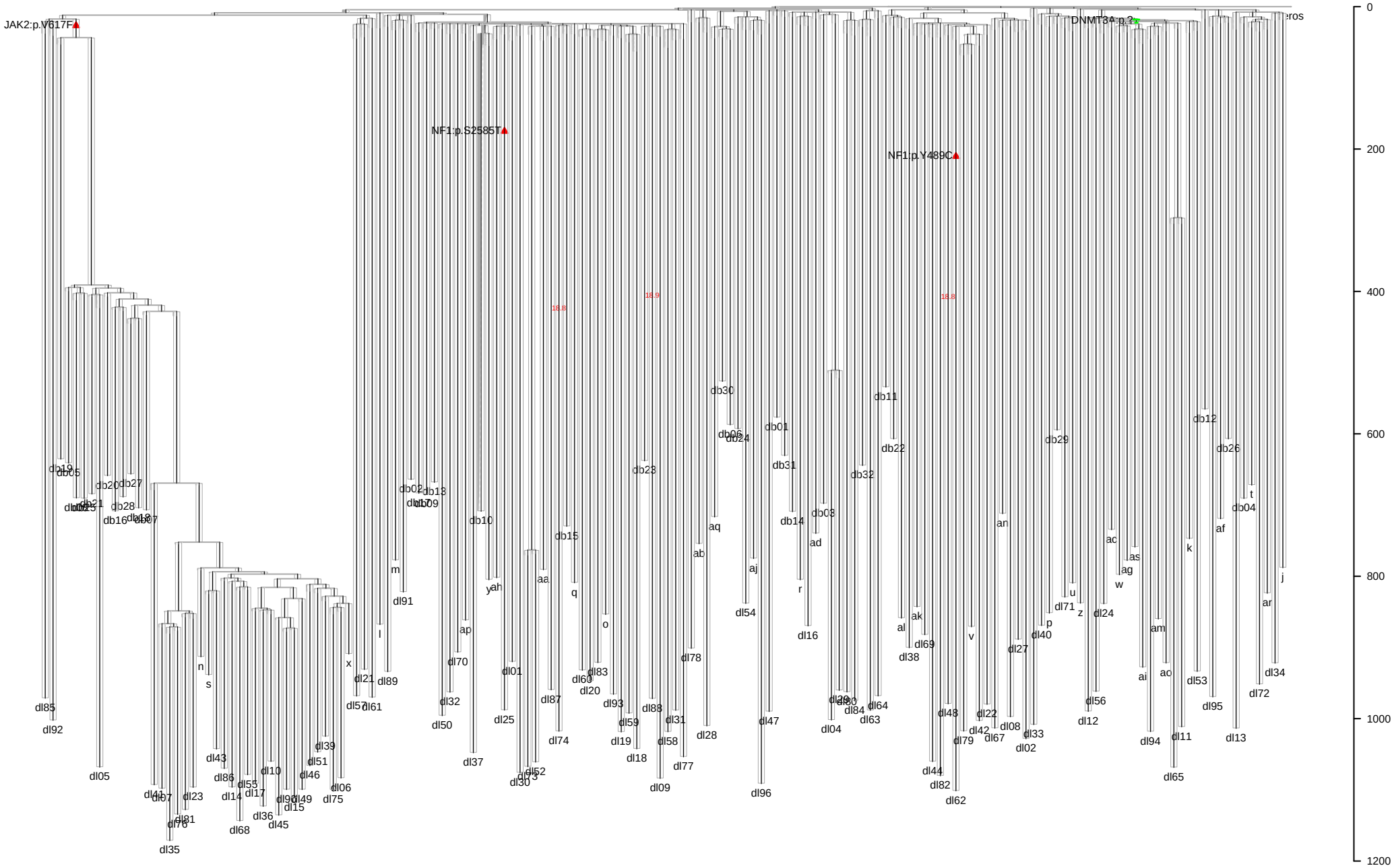
**PD5182: Annotated with VAF from ap**
**Mean Depth=12.56**



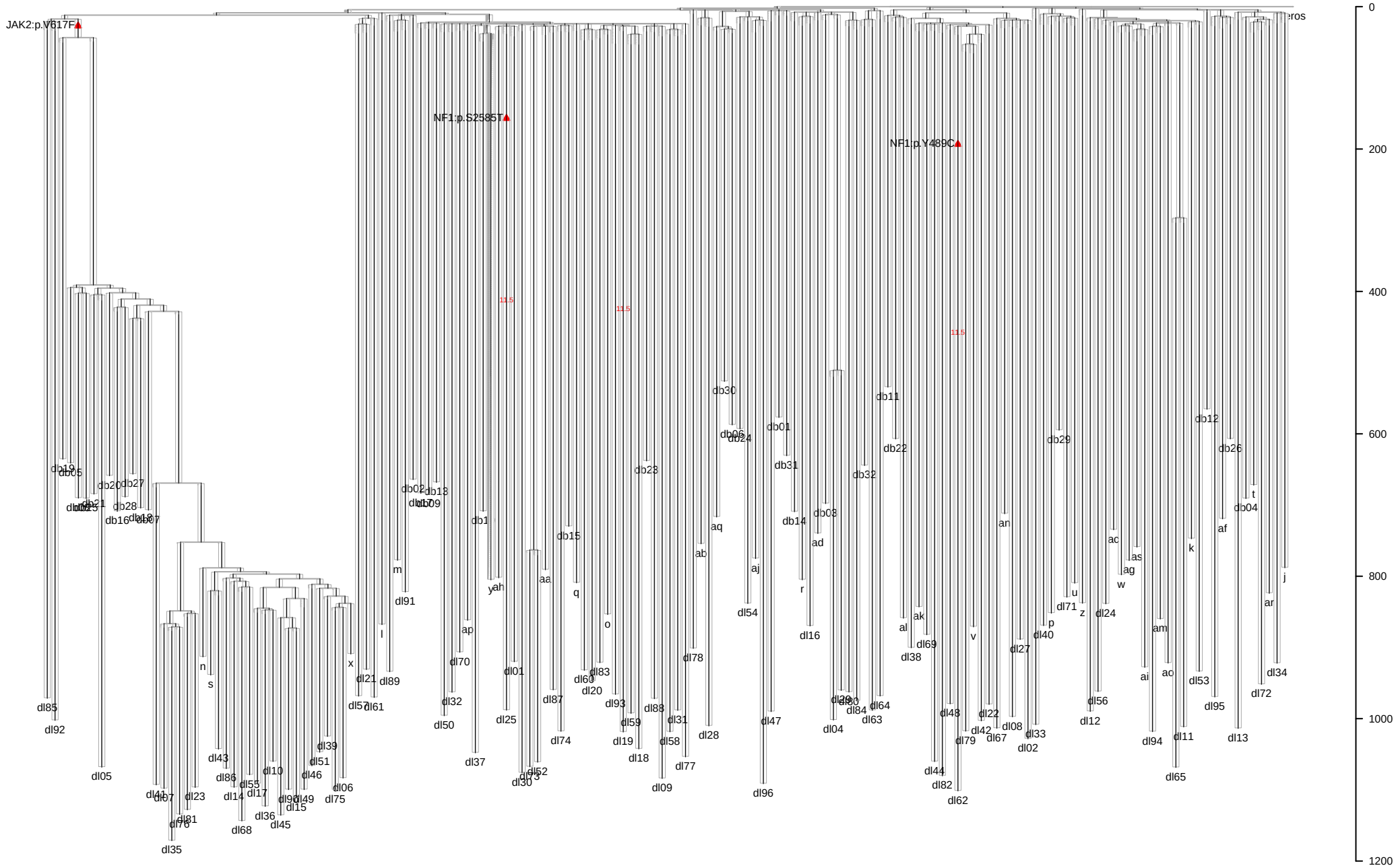
**PD5182: Annotated with VAF from dl37**
**Mean Depth=21.55**



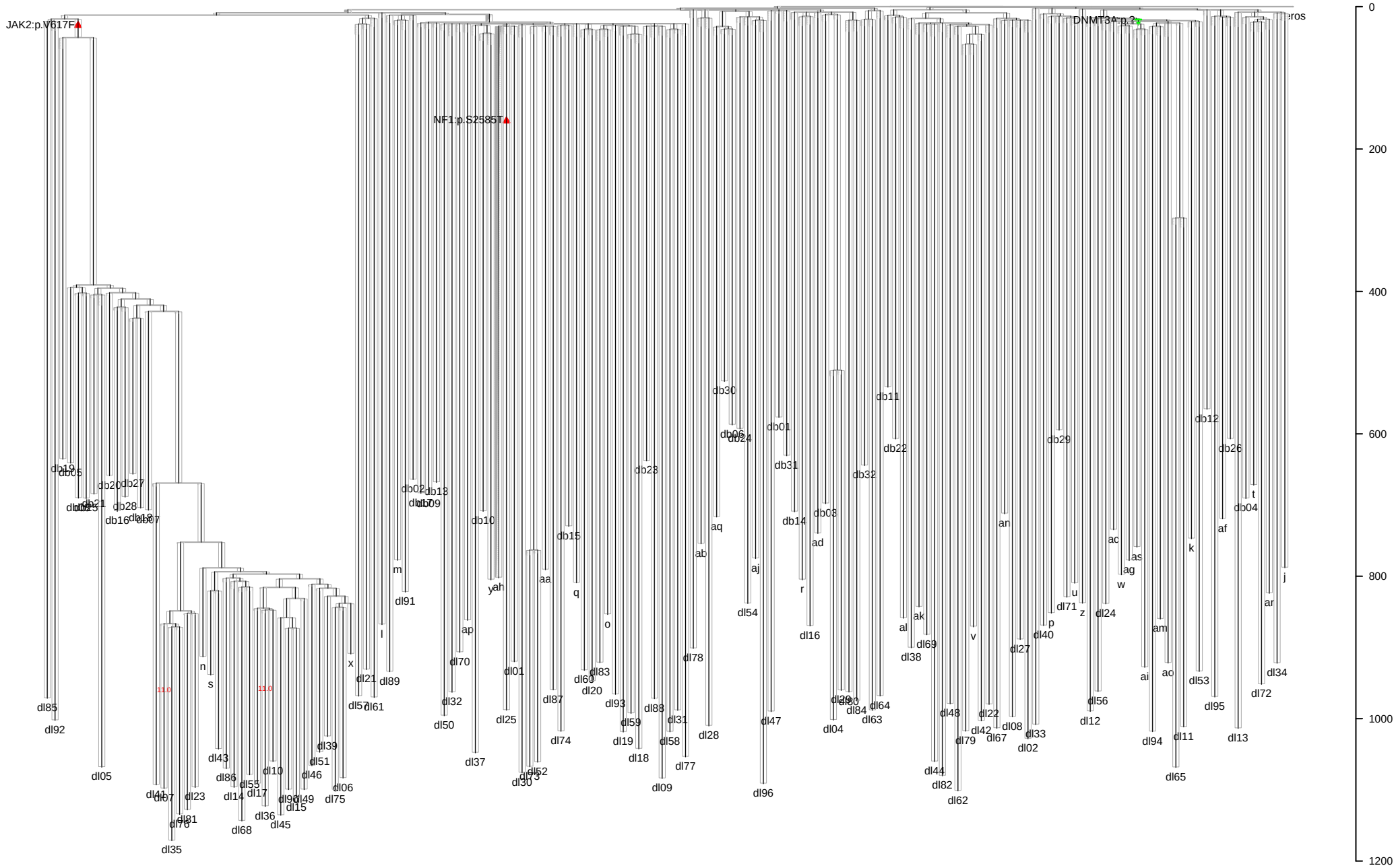
**PD5182: Annotated with VAF from db10**
**Mean Depth=19.30**



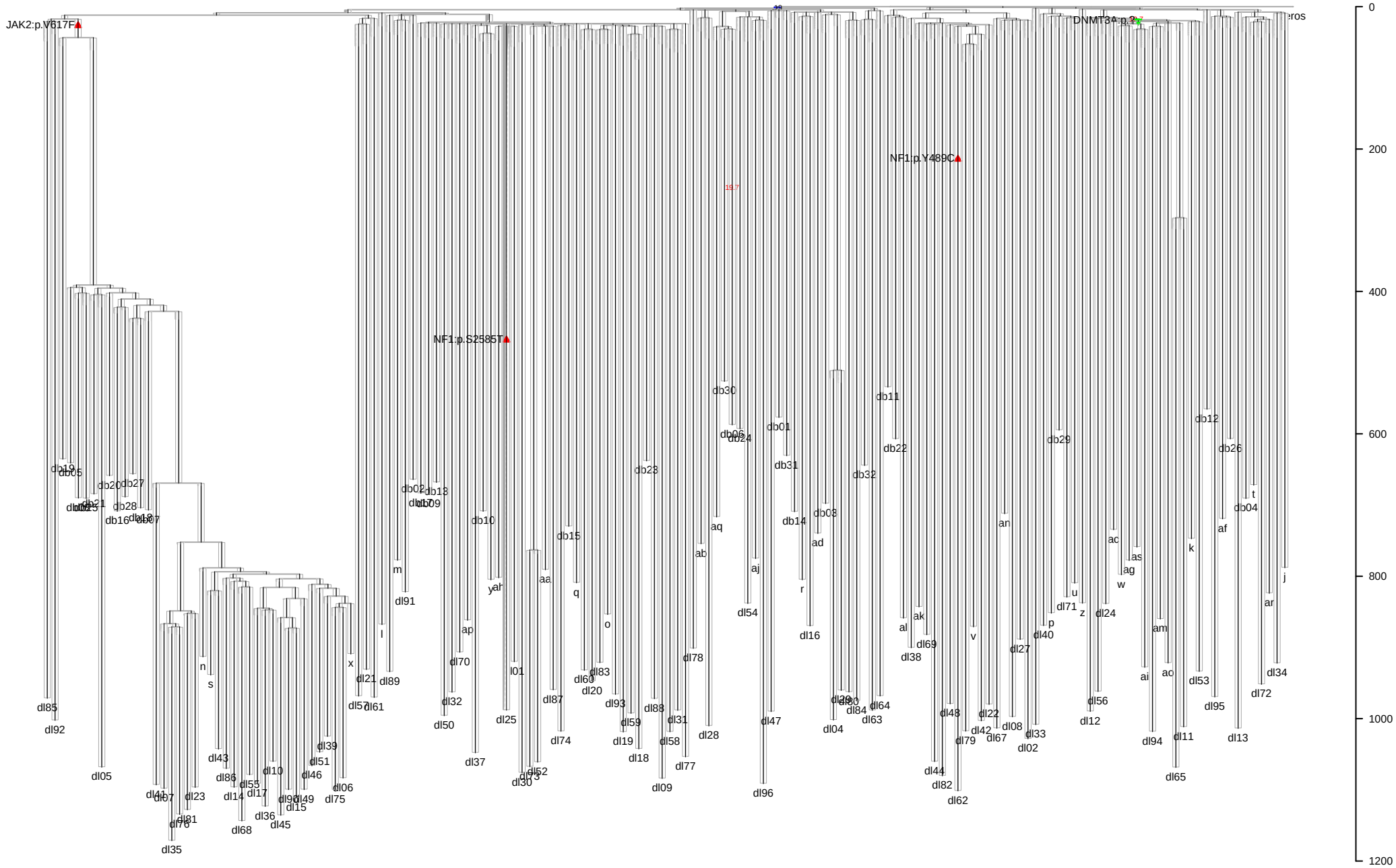
**PD5182: Annotated with VAF from y**
**Mean Depth=11.83**



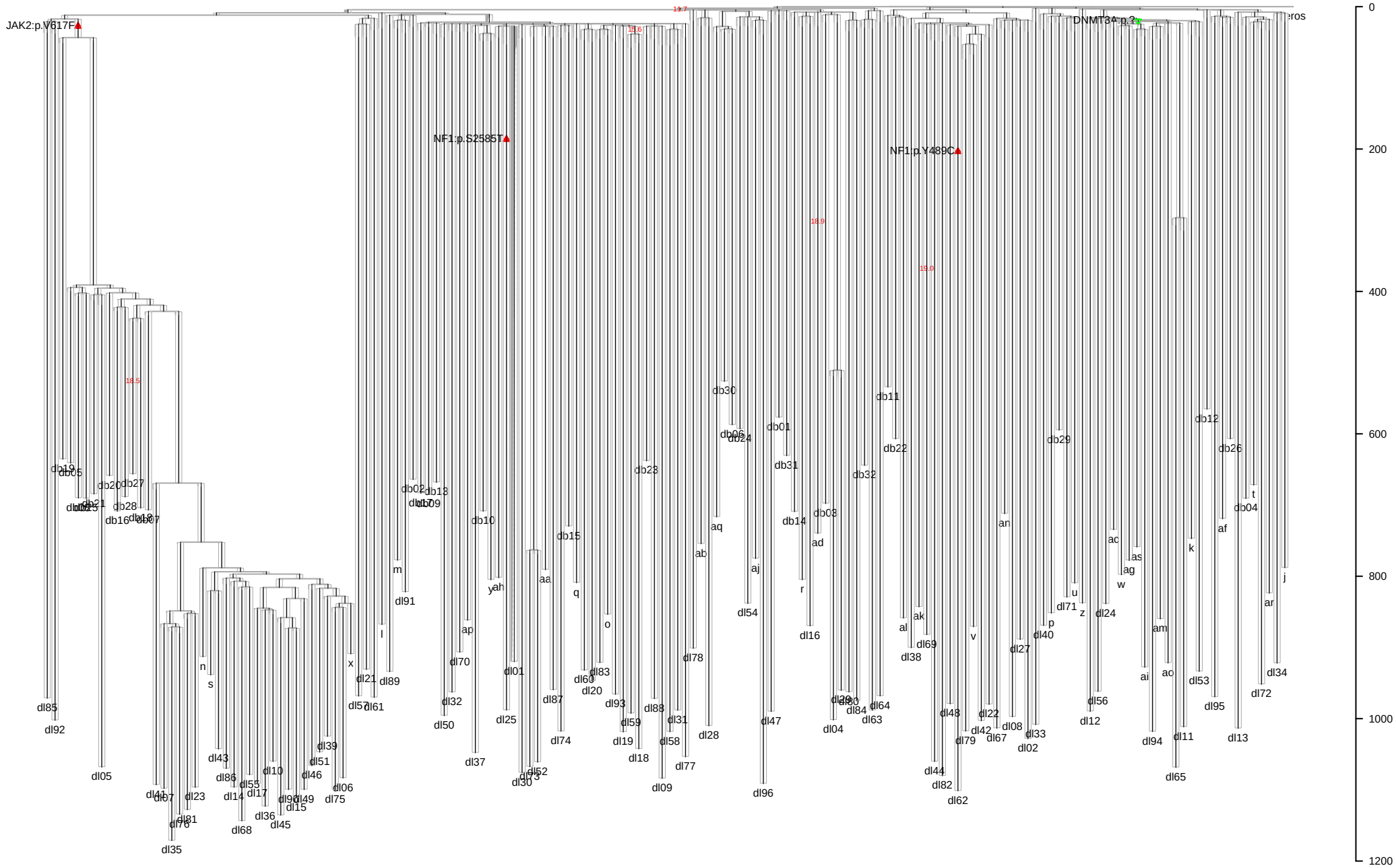
**PD5182: Annotated with VAF from ah**
**Mean Depth=11.68**



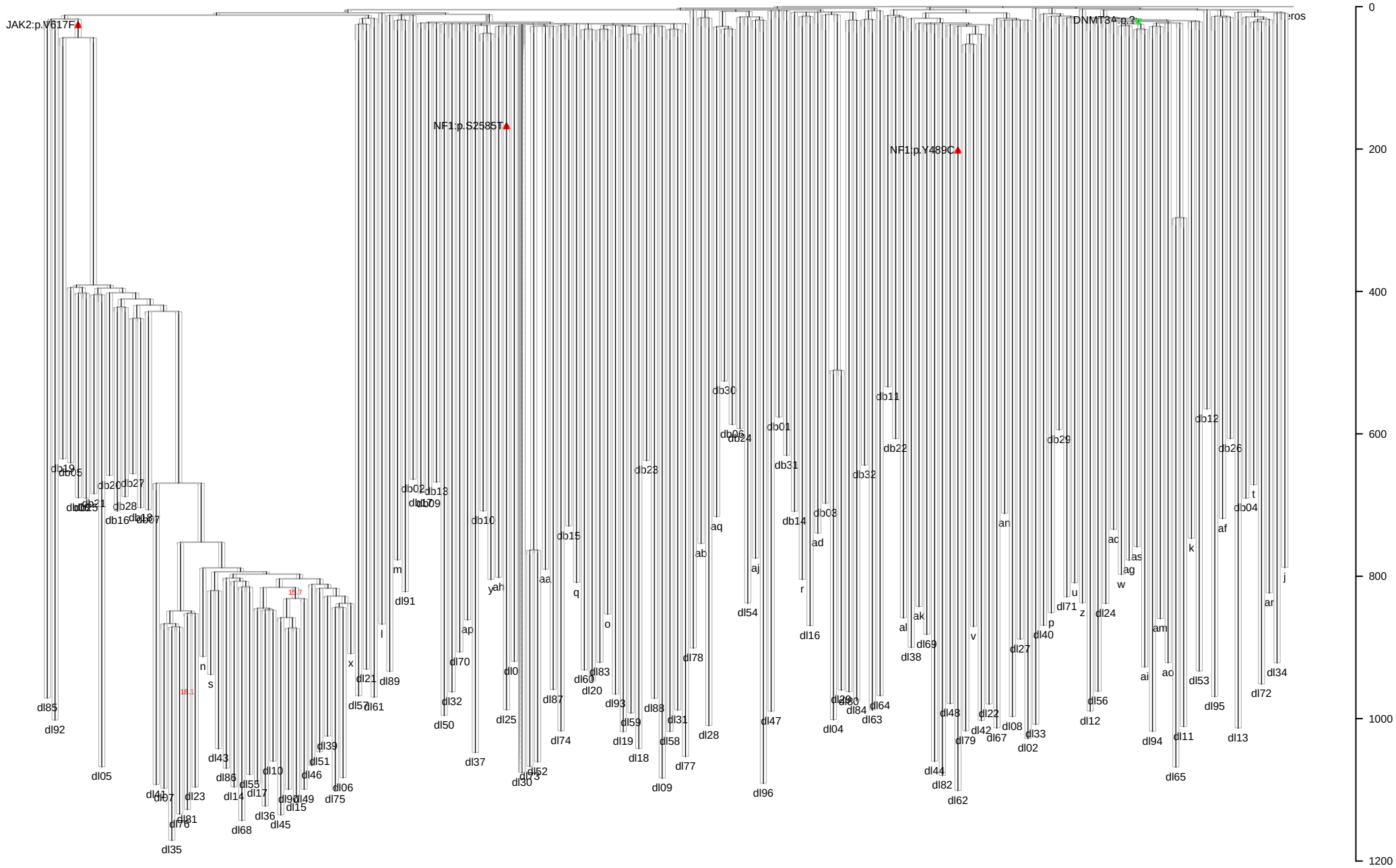
**PD5182: Annotated with VAF from dl25**
**Mean Depth=20.66**



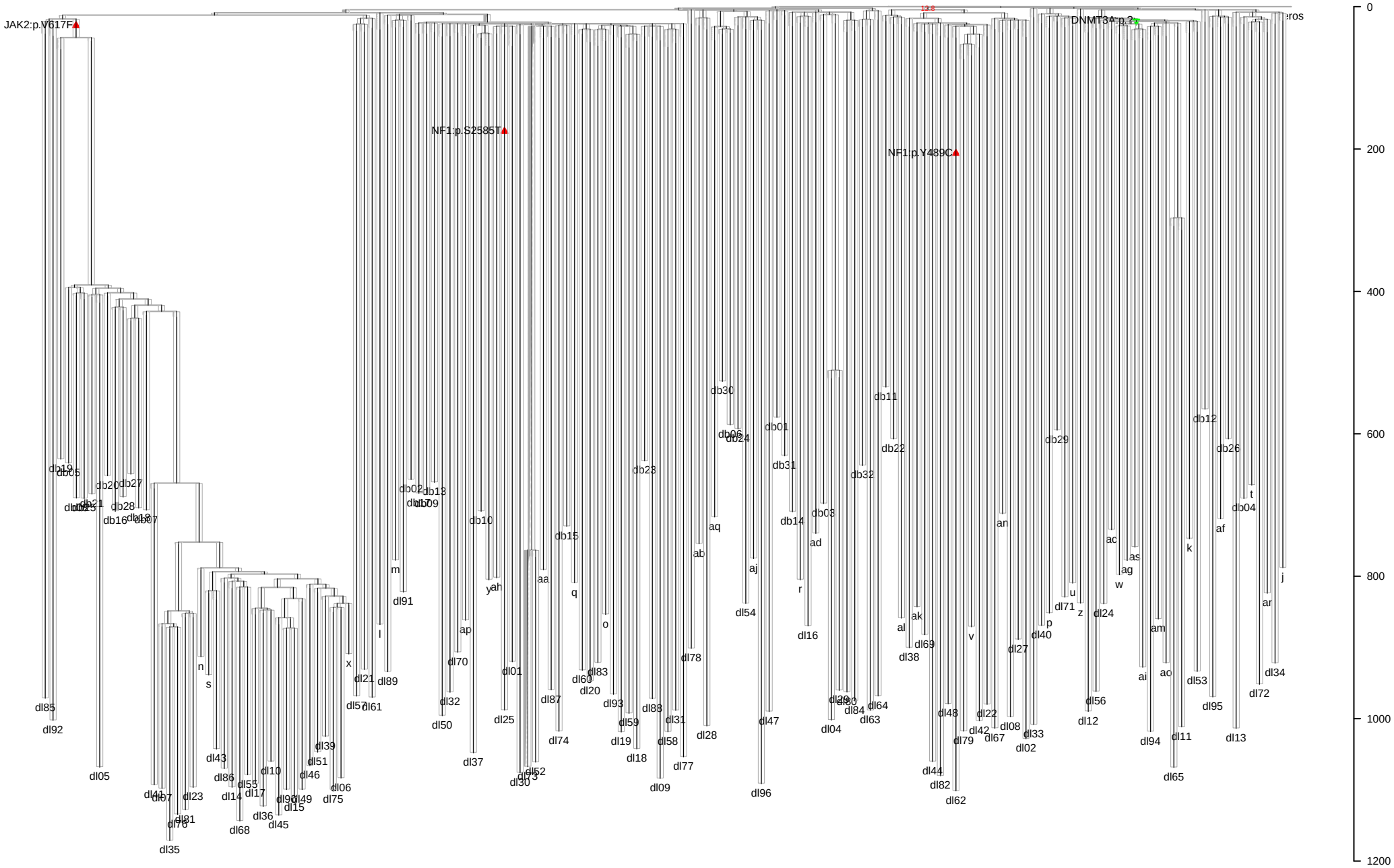
**PD5182: Annotated with VAF from dl01**
**Mean Depth=19.43**



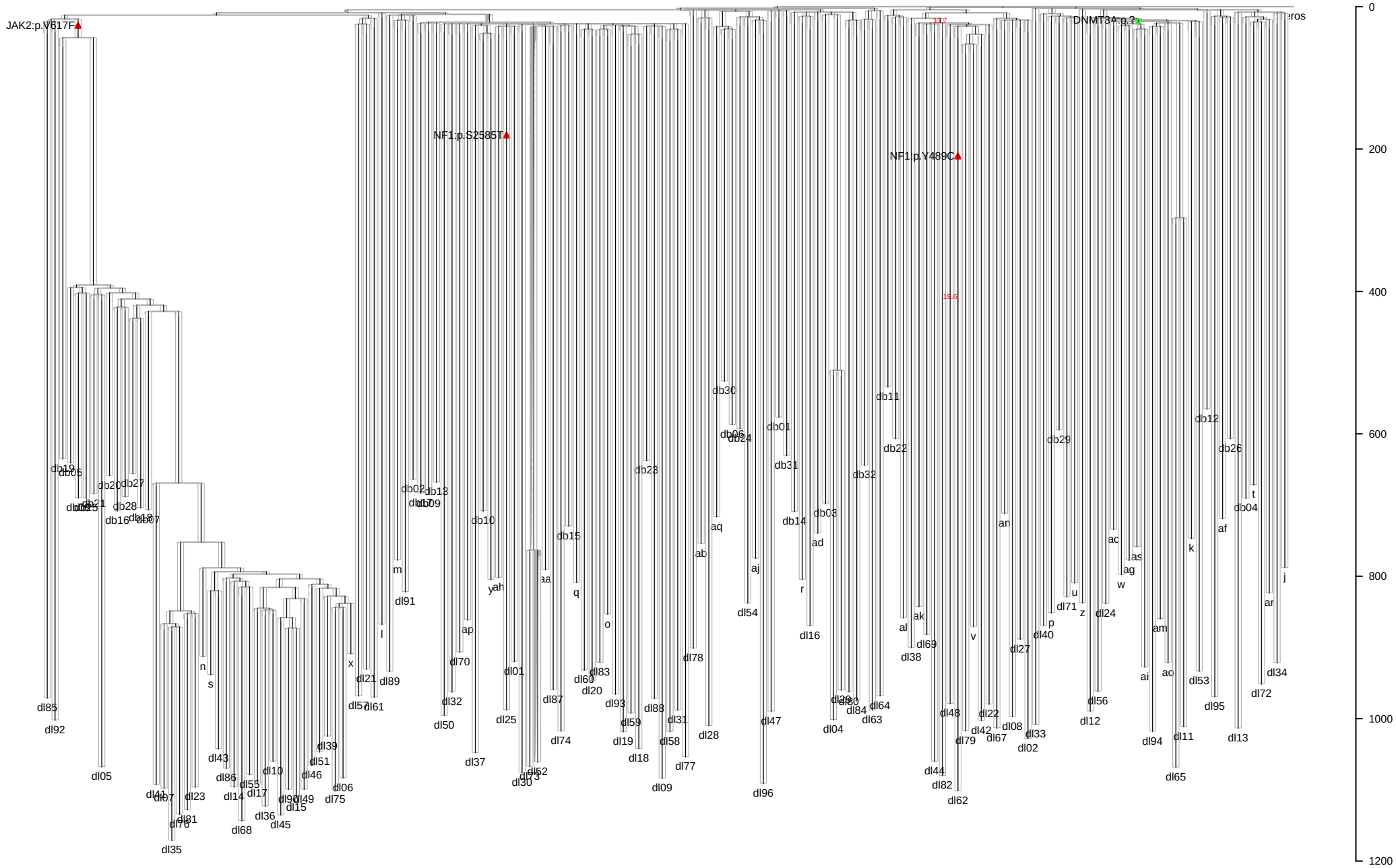
**PD5182: Annotated with VAF from dl30**
**Mean Depth=18.96**



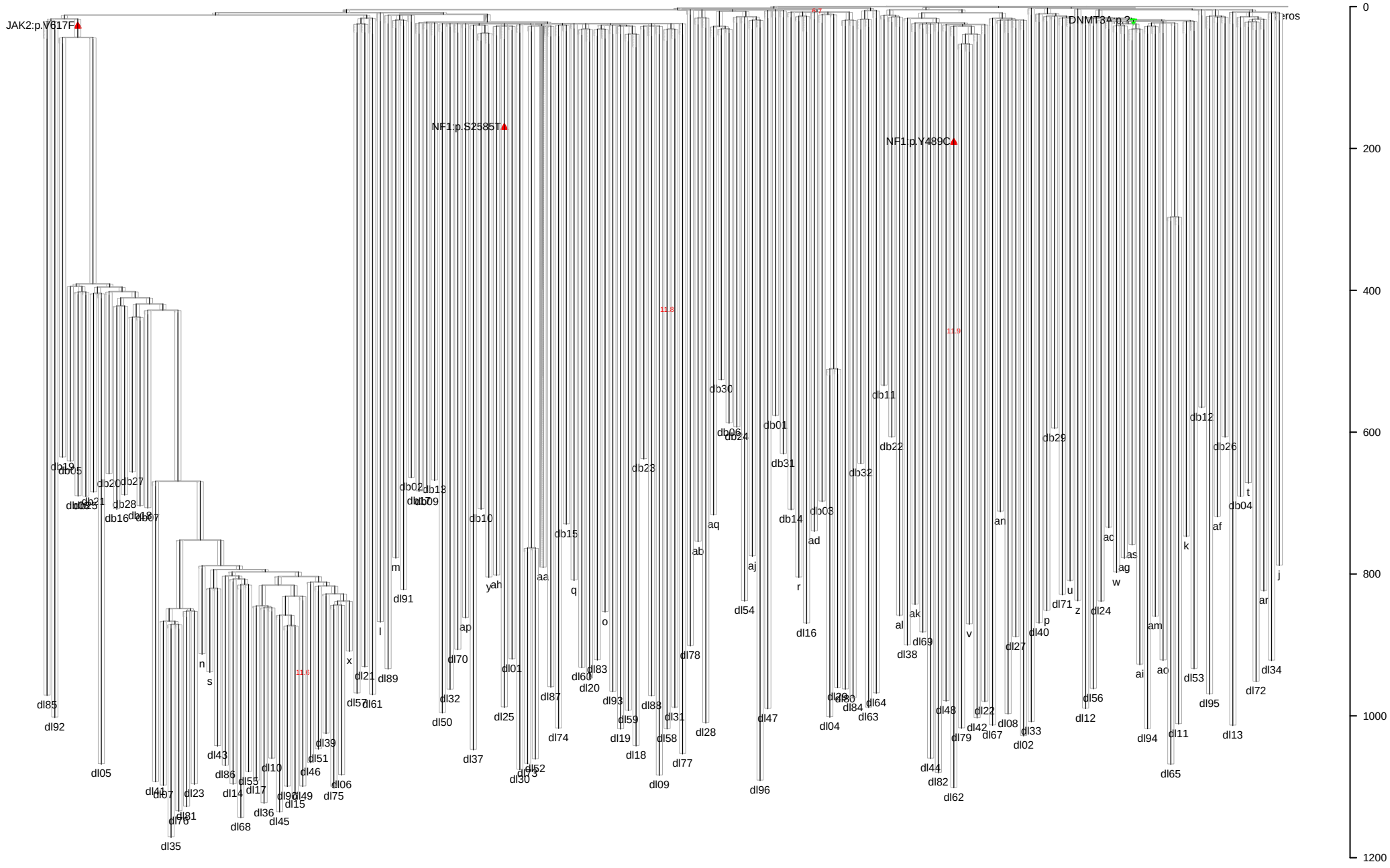
**PD5182: Annotated with VAF from dl73**
**Mean Depth=20.89**



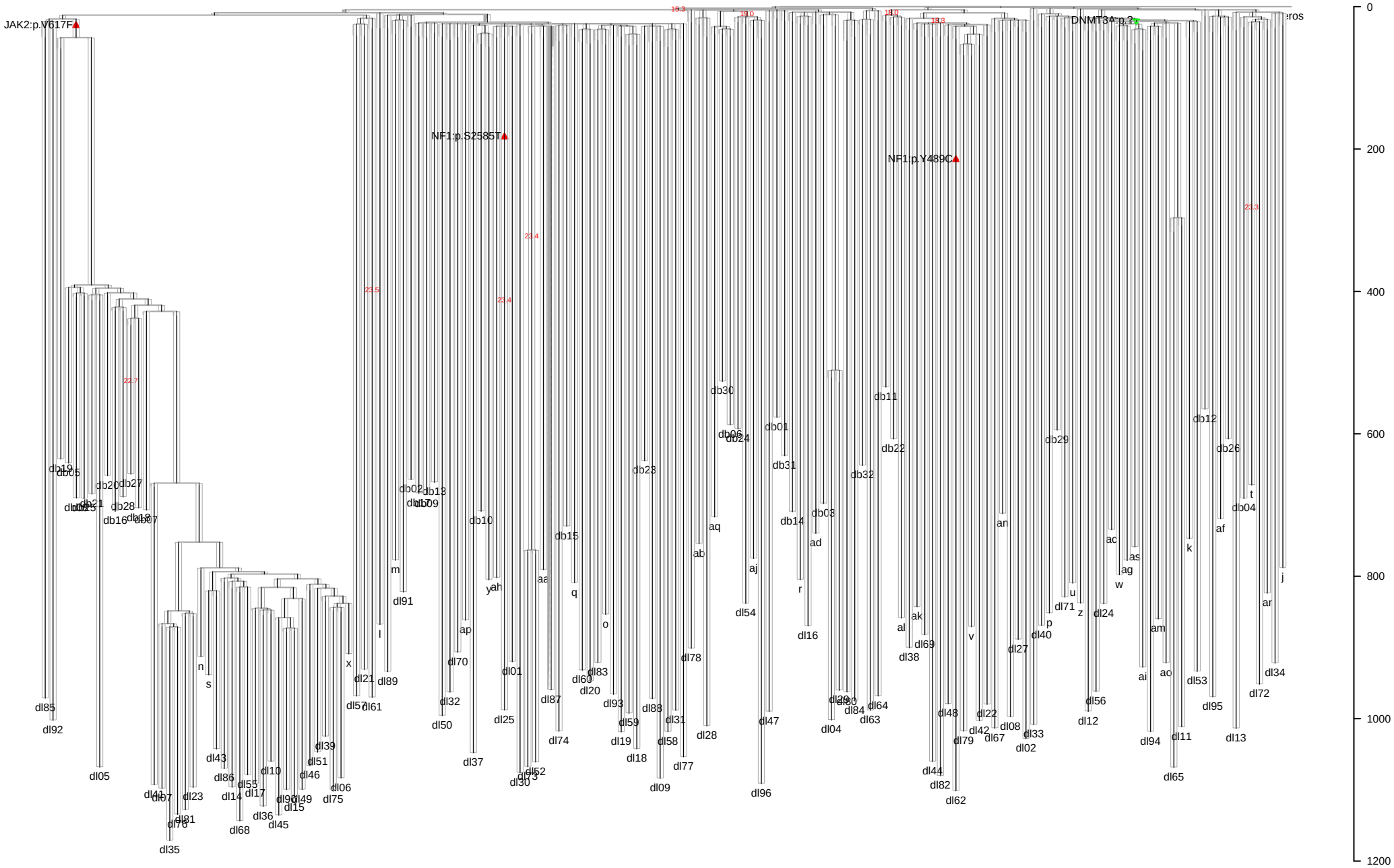
**PD5182: Annotated with VAF from dl52**
**Mean Depth=20.06**



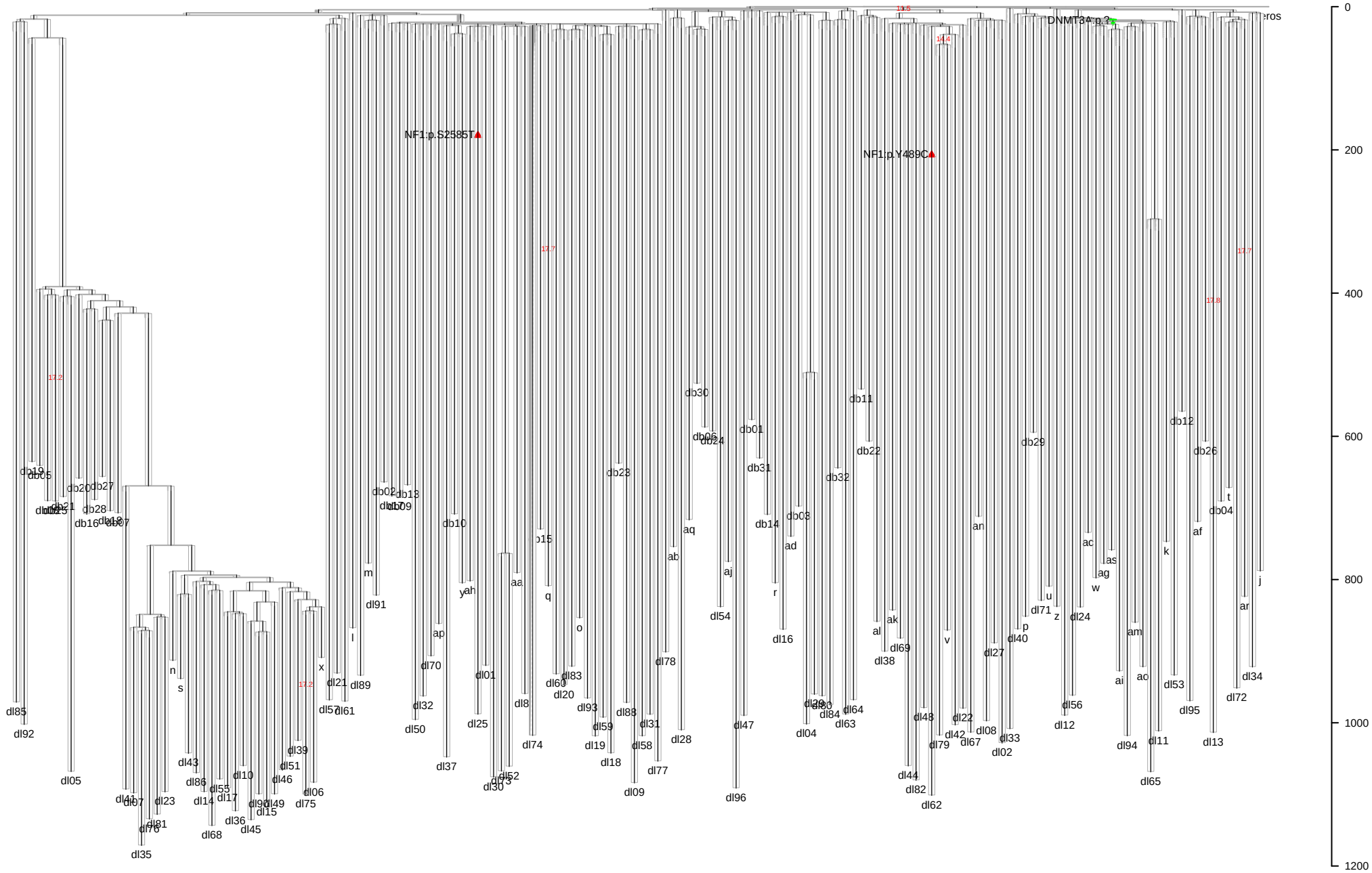
**PD5182: Annotated with VAF from aa**
**Mean Depth=12.23**



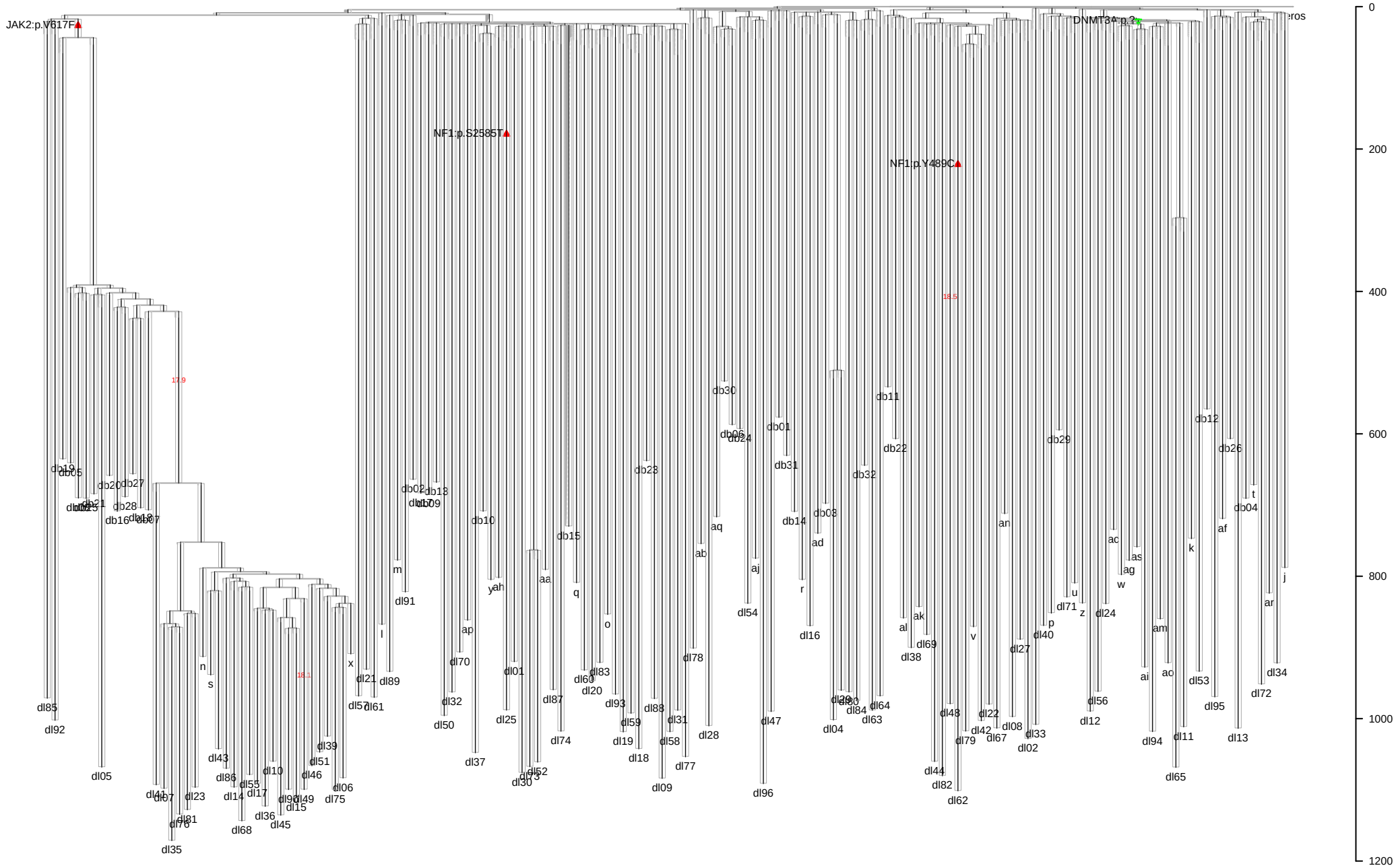
**PD5182: Annotated with VAF from dl87**
**Mean Depth=23.94**



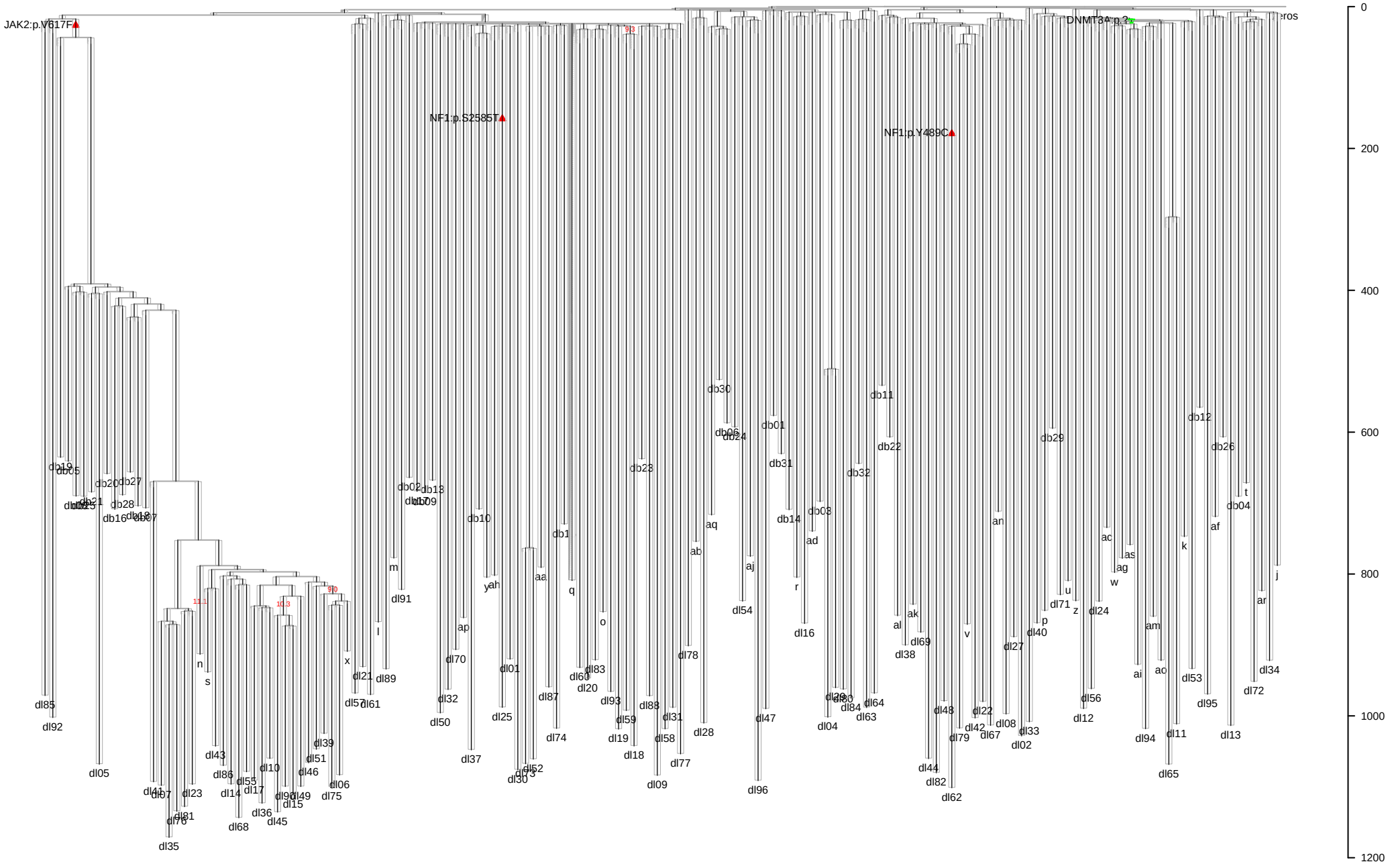
**PD5182: Annotated with VAF from dl74**
**Mean Depth=18.21**



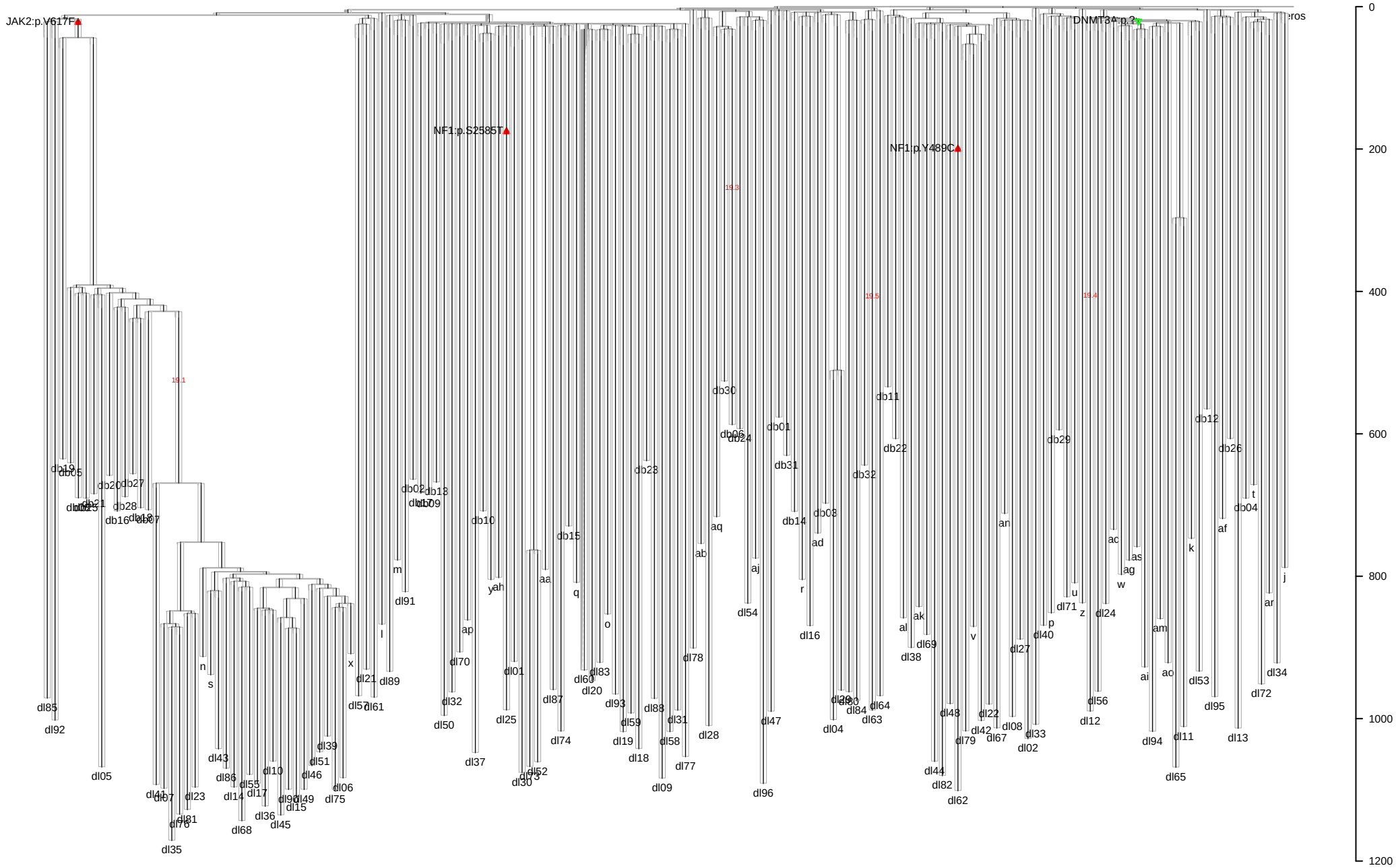
**PD5182: Annotated with VAF from db15**
**Mean Depth=18.93**



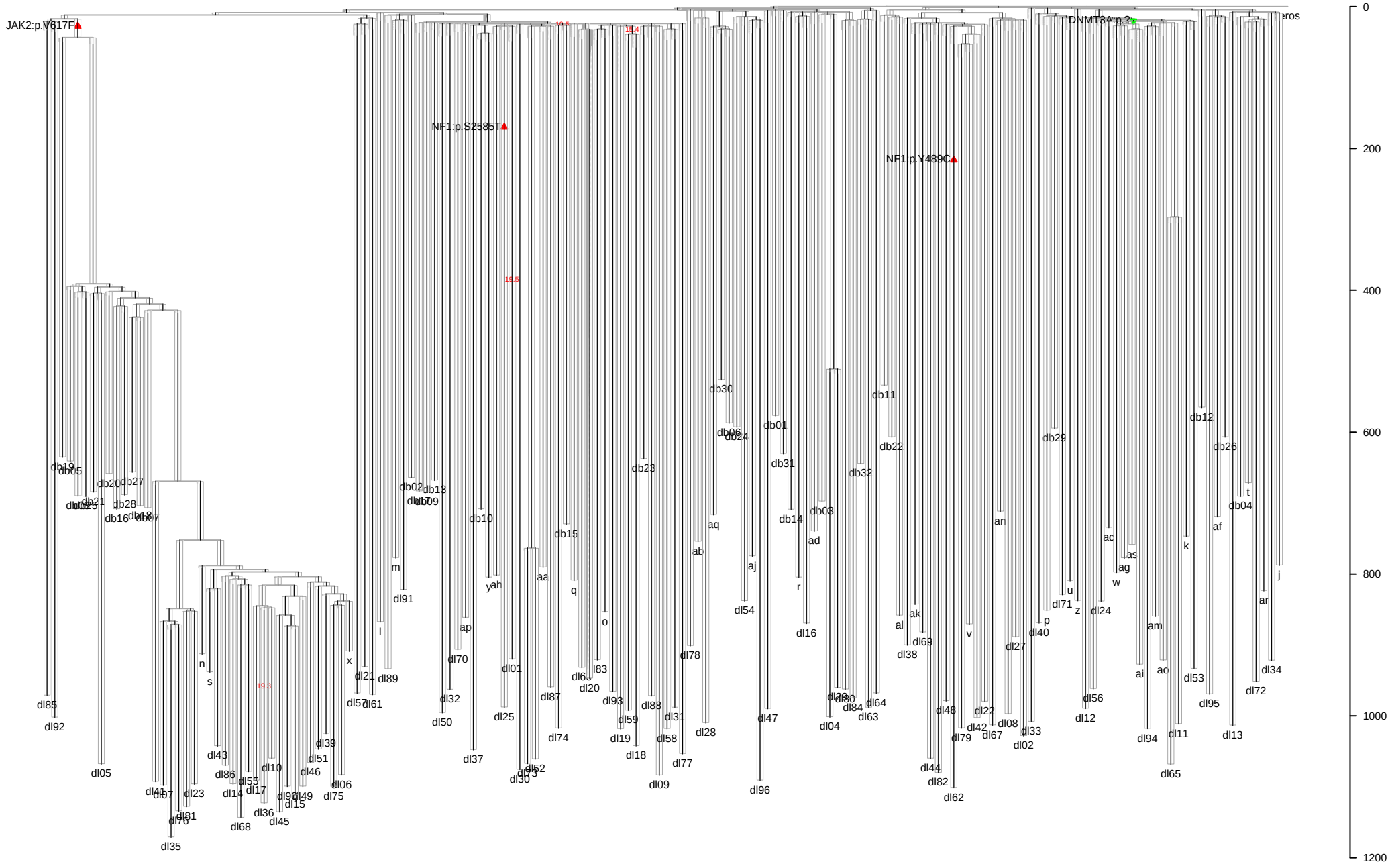
**PD5182: Annotated with VAF from q**
**Mean Depth=12.09**



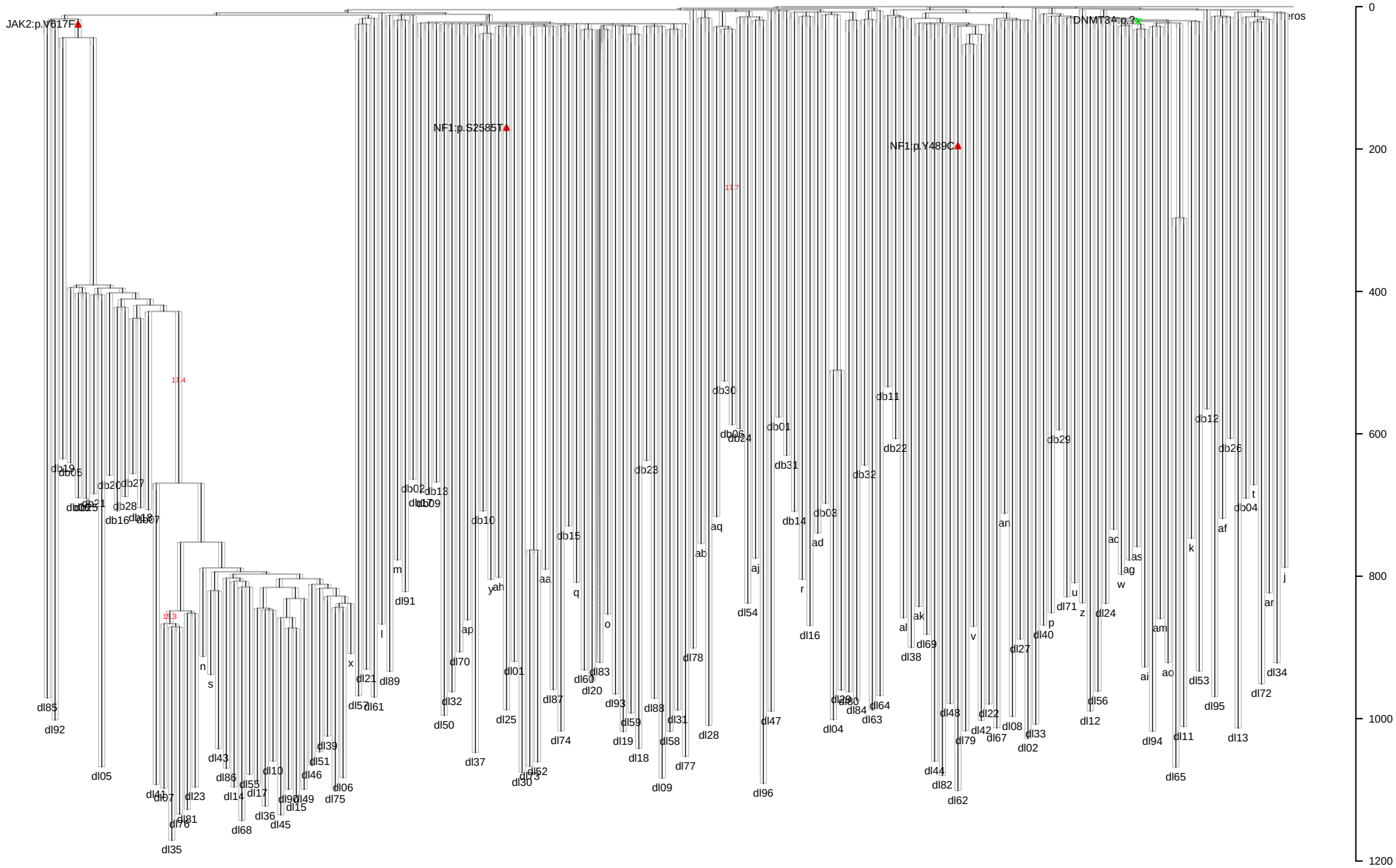
**PD5182: Annotated with VAF from dl60**
**Mean Depth=19.97**



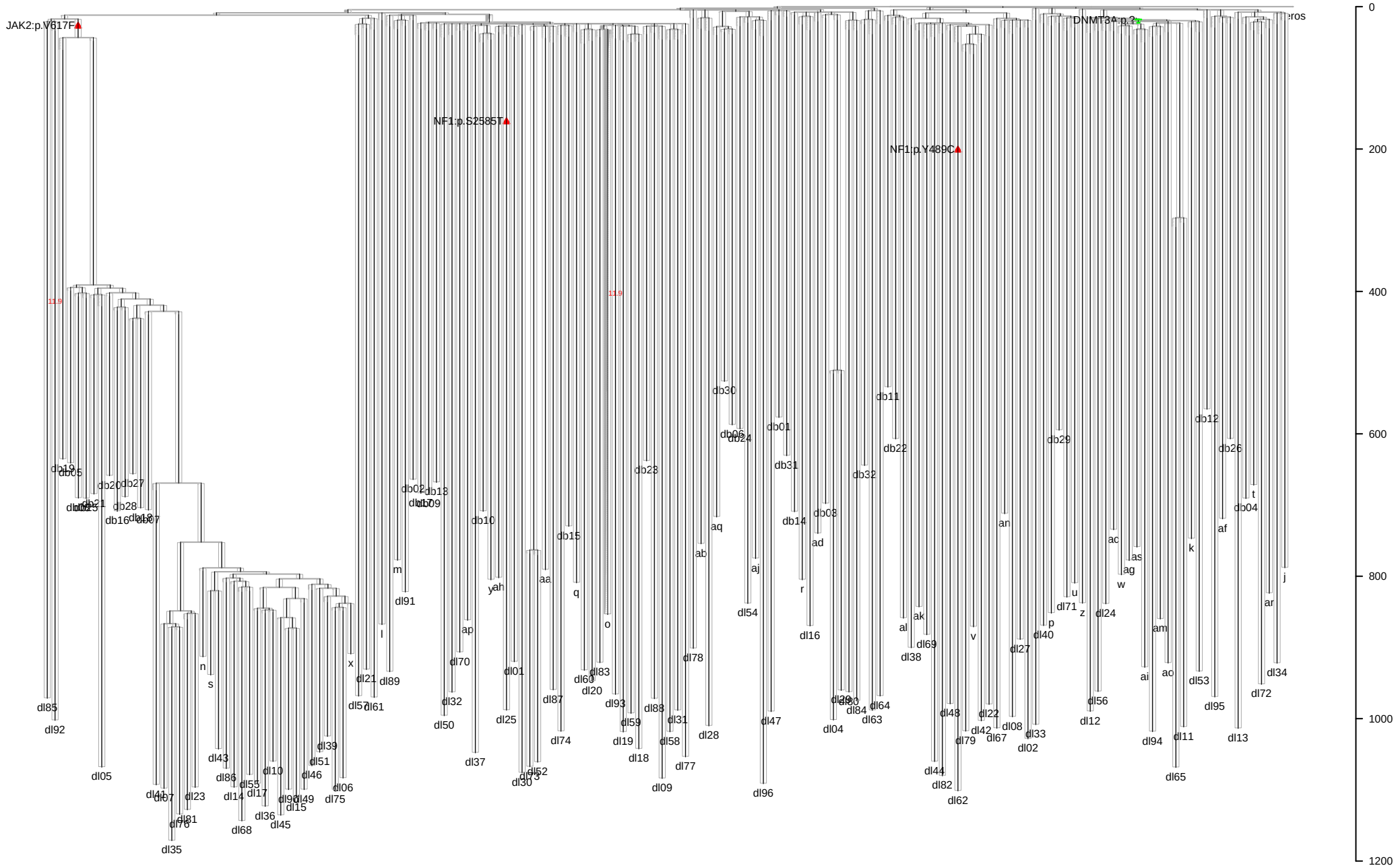
**PD5182: Annotated with VAF from dl20**
**Mean Depth=20.18**



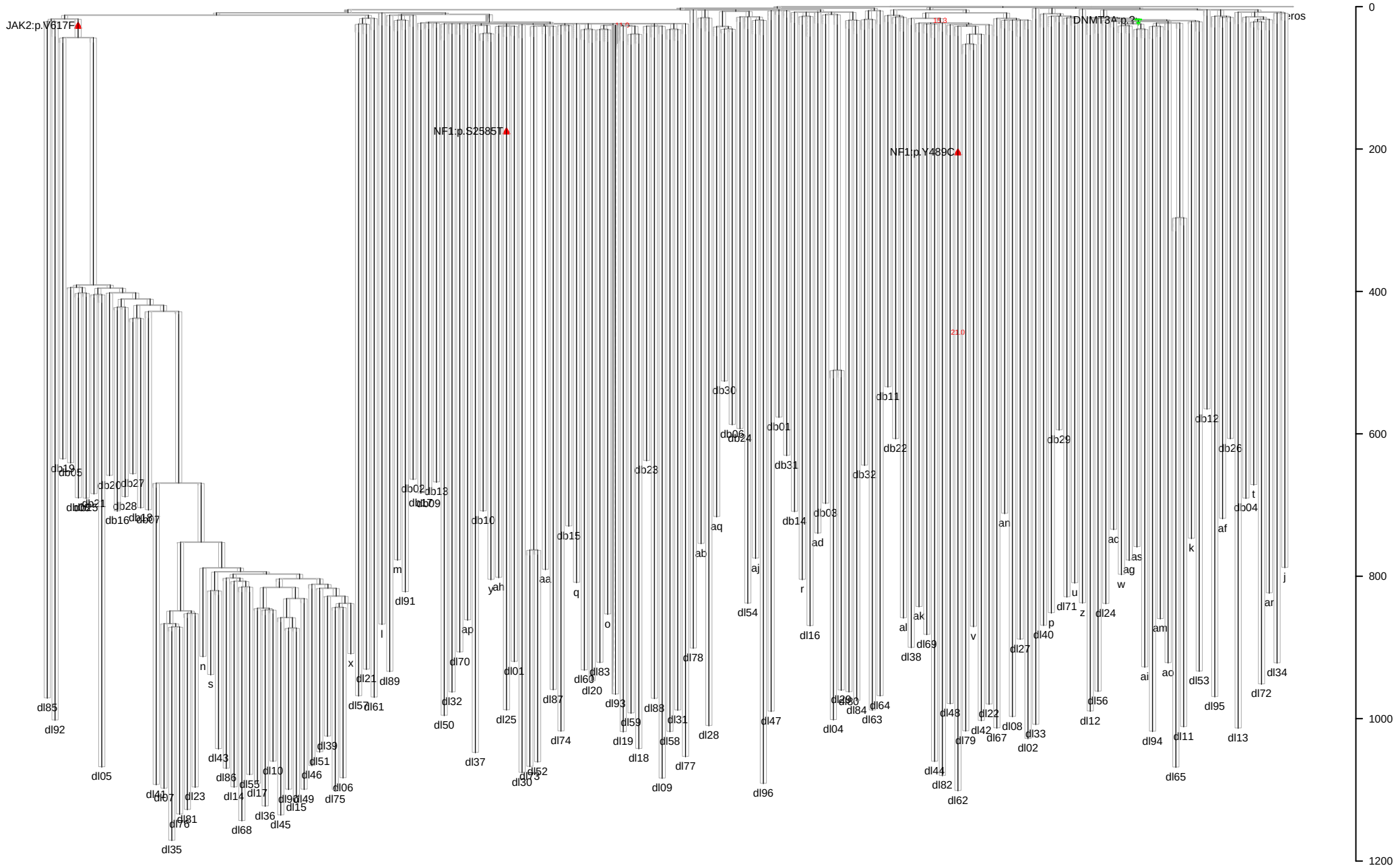
**PD5182: Annotated with VAF from dl83**
**Mean Depth=18.23**



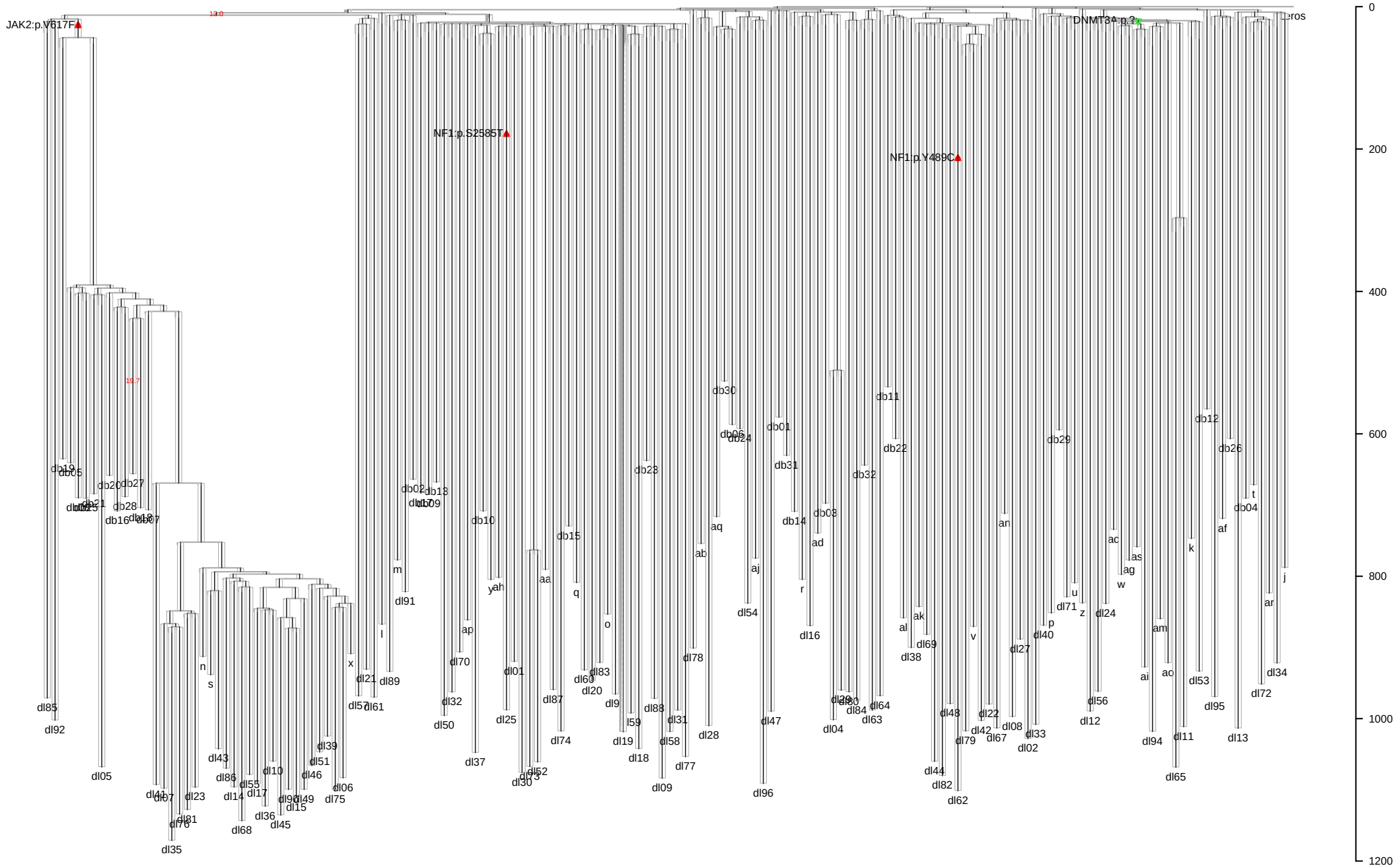
**PD5182: Annotated with VAF from o**
**Mean Depth=12.22**



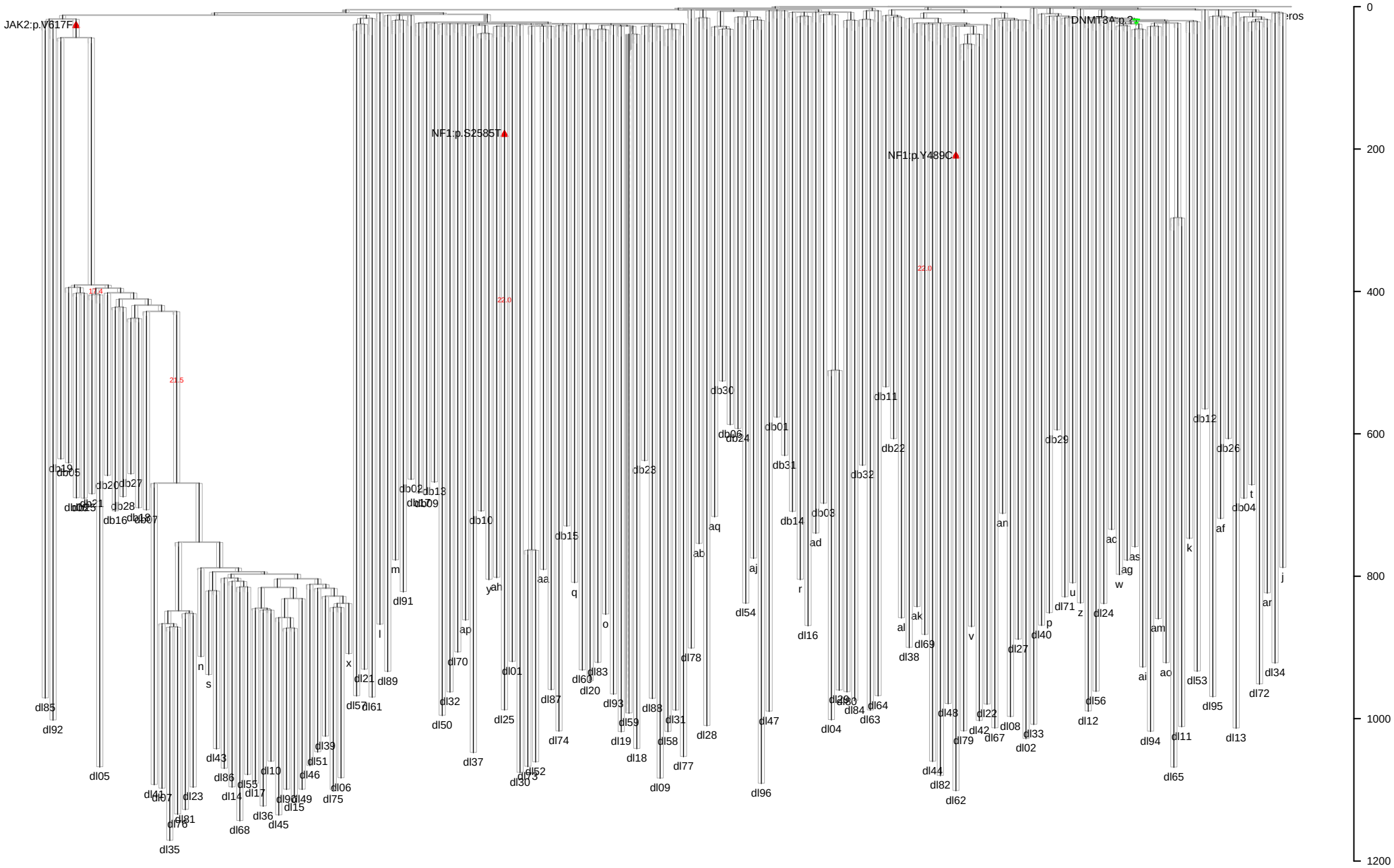
**PD5182: Annotated with VAF from dl93**
**Mean Depth=21.49**



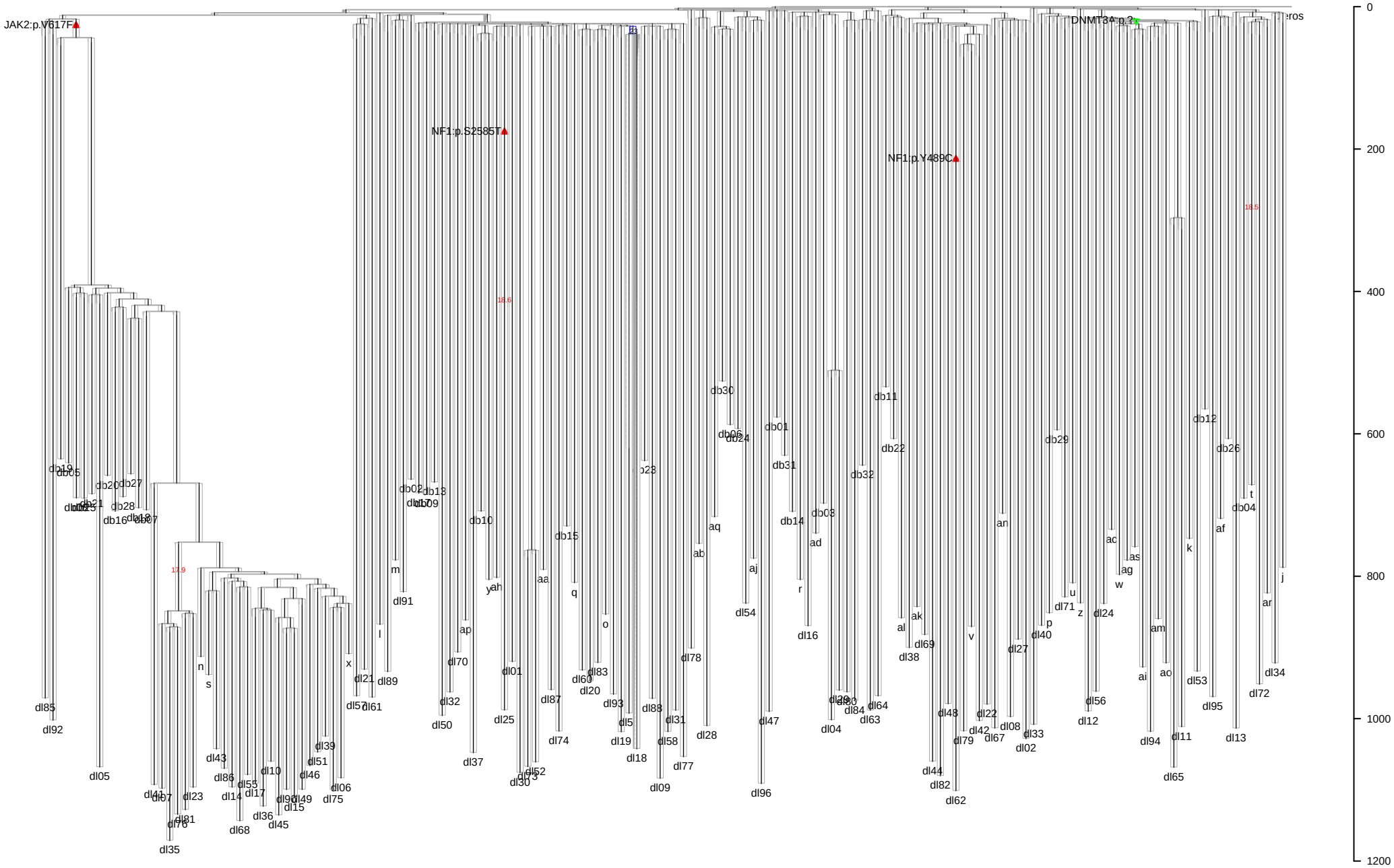
**PD5182: Annotated with VAF from dl19**
**Mean Depth=20.79**



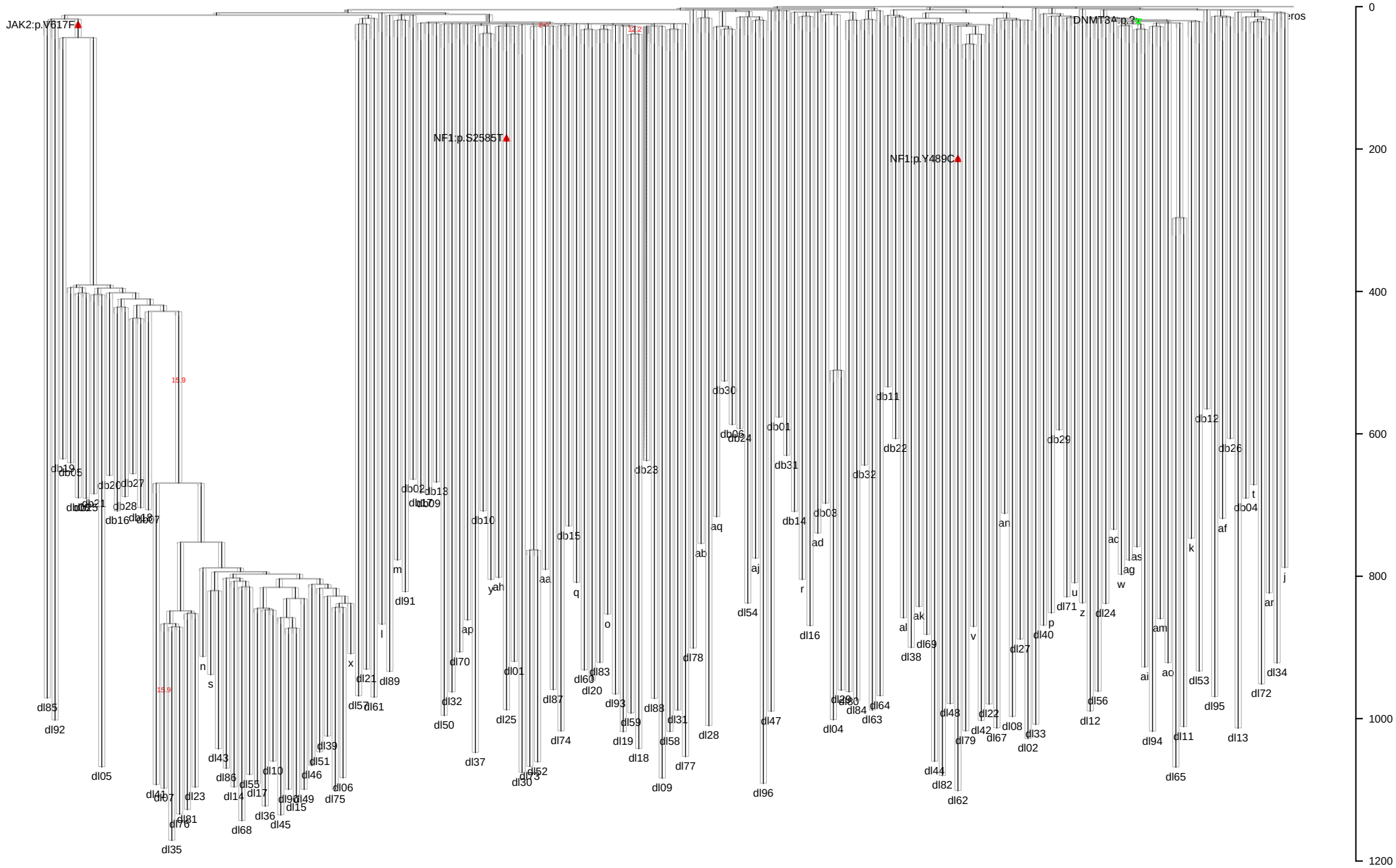
**PD5182: Annotated with VAF from dl59**
**Mean Depth=22.46**



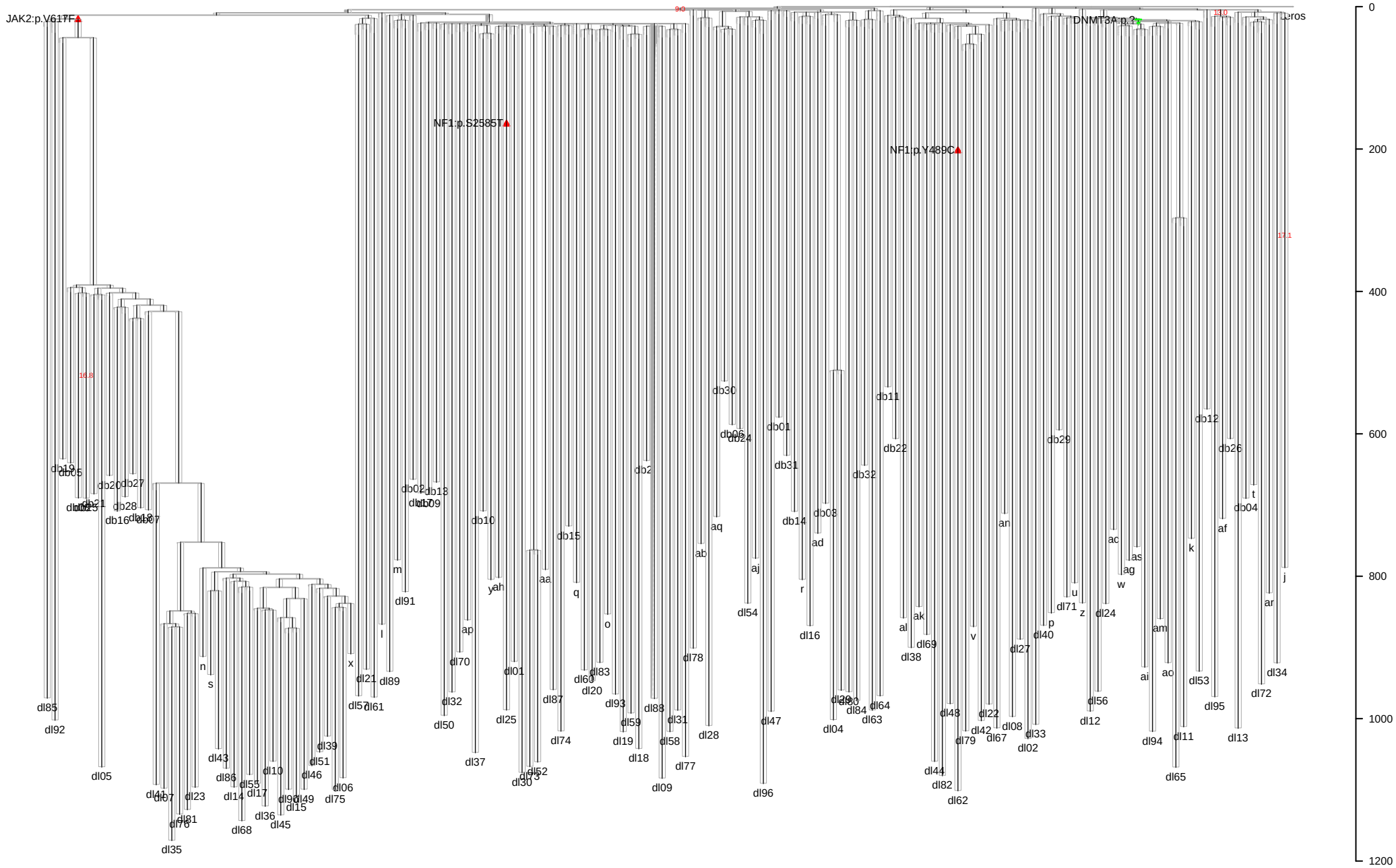
**PD5182: Annotated with VAF from dl18**
**Mean Depth=19.25**



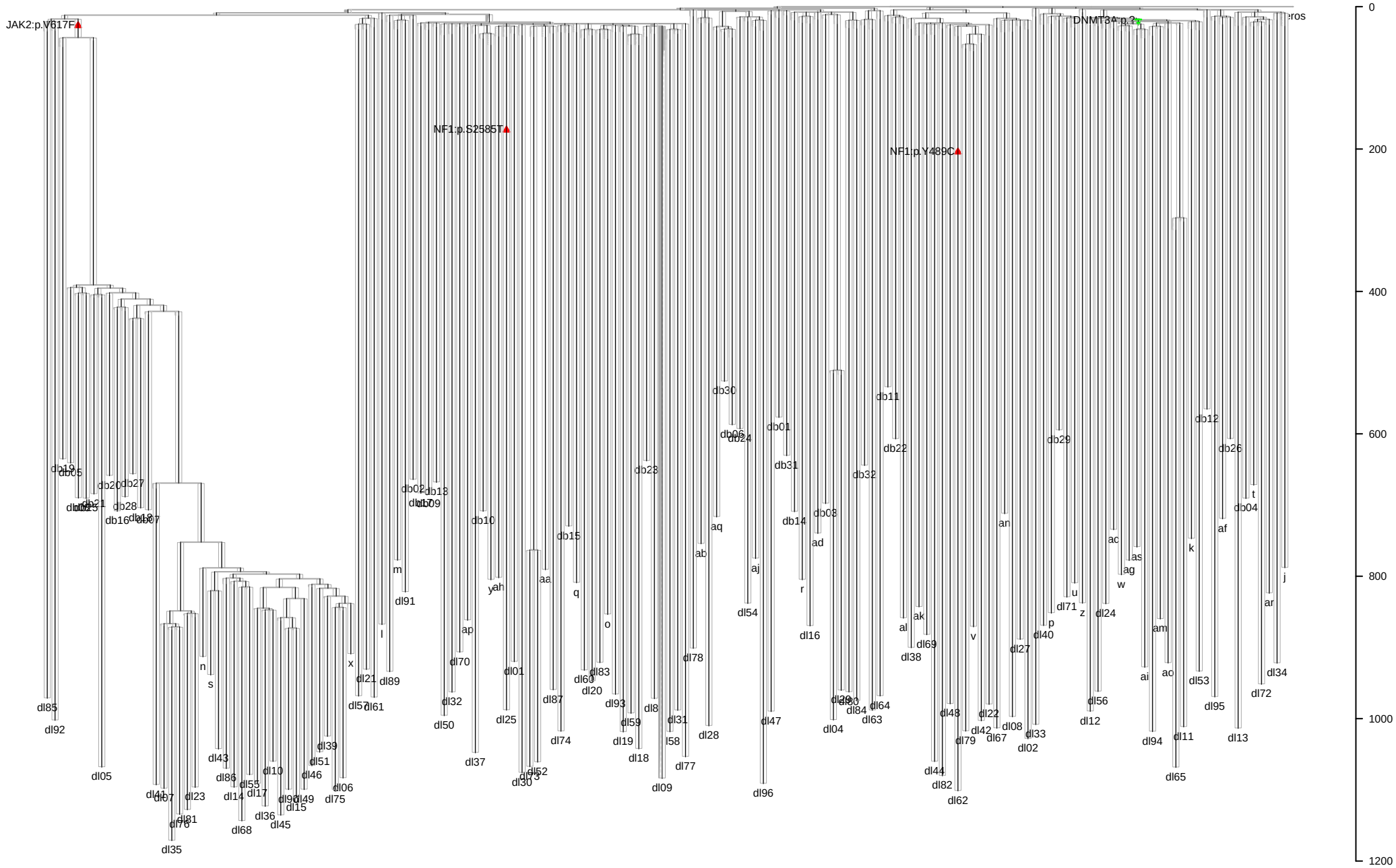
**PD5182: Annotated with VAF from db23**
**Mean Depth=16.88**



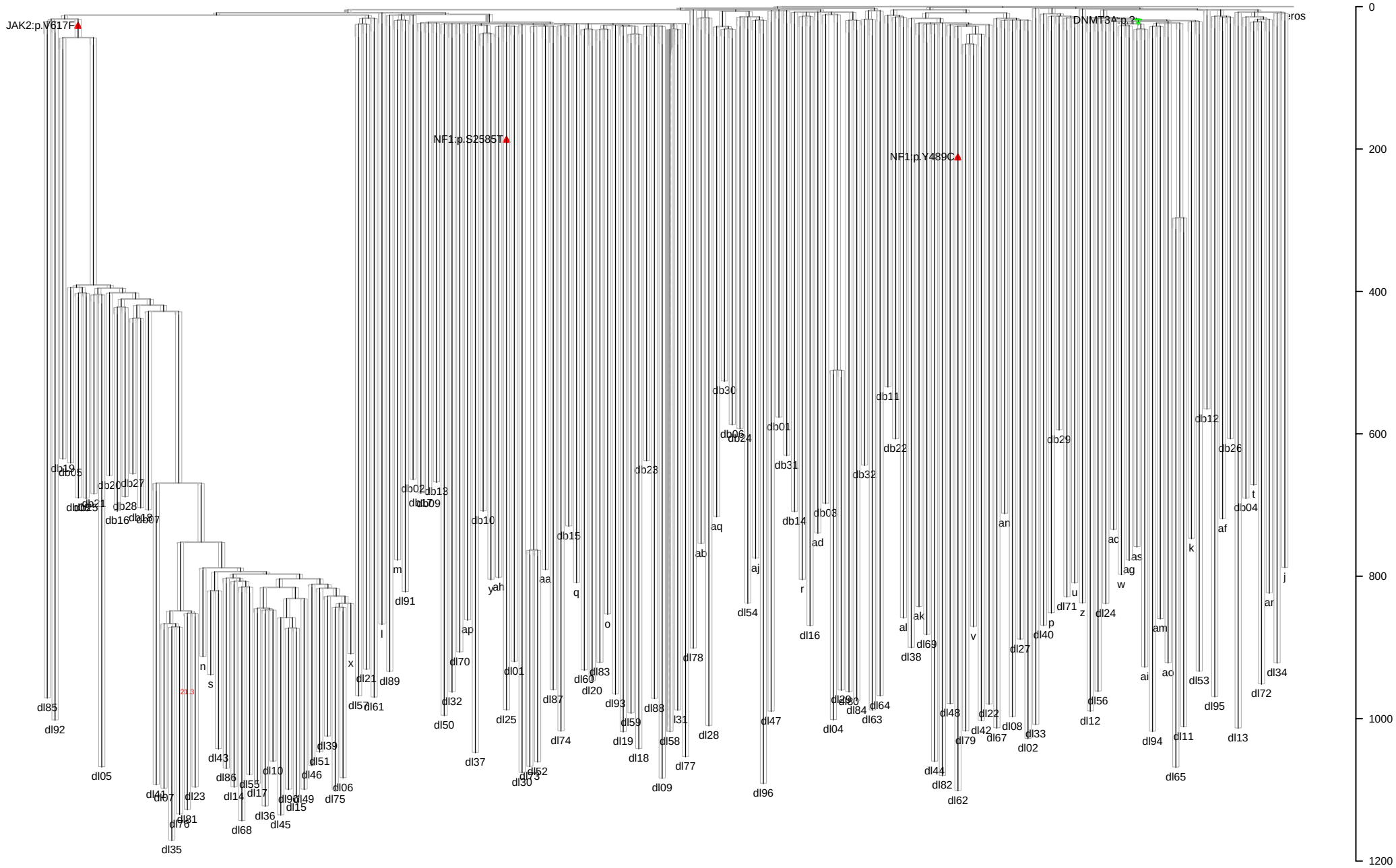
**PD5182: Annotated with VAF from dl88**
**Mean Depth=17.68**



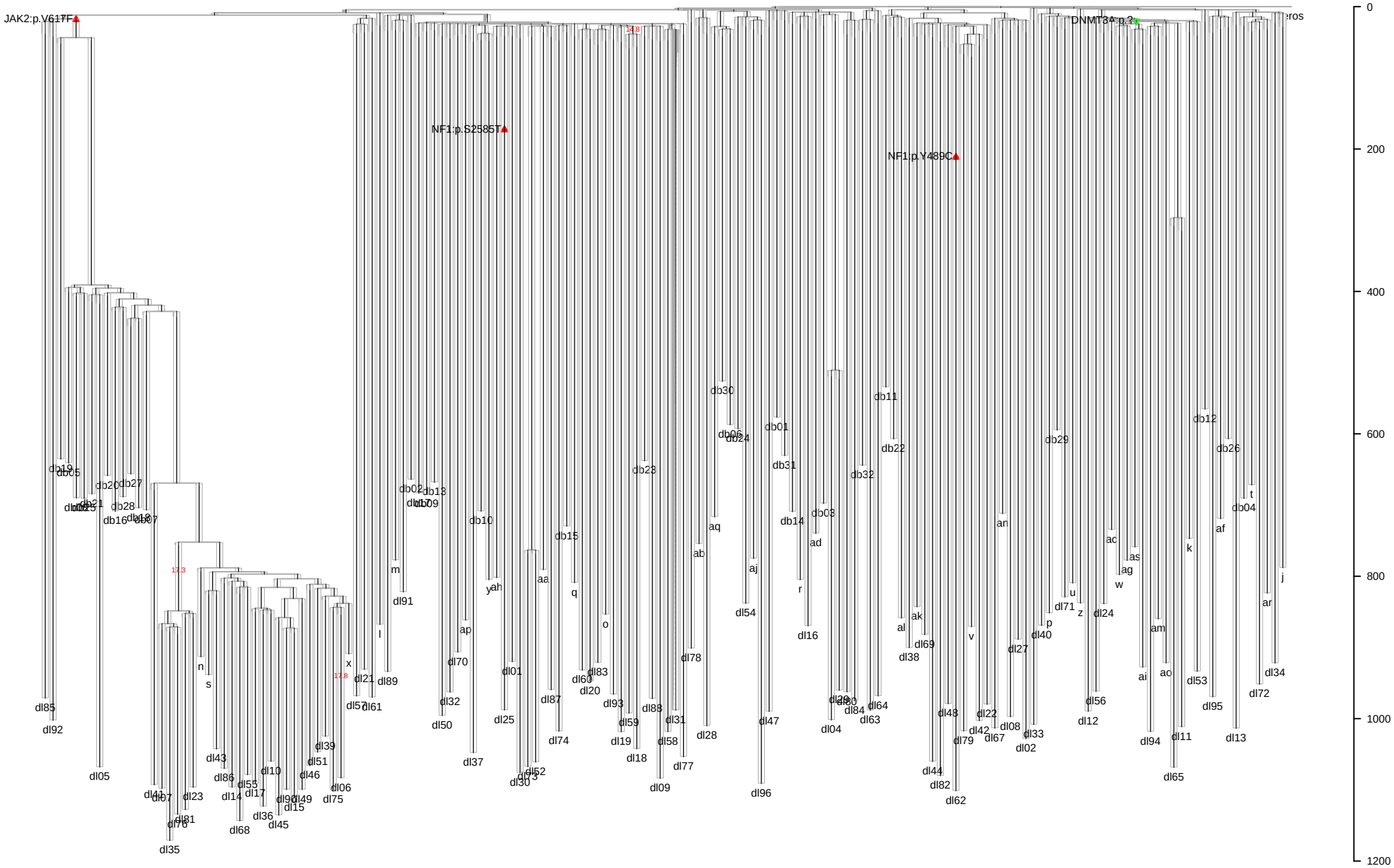
**PD5182: Annotated with VAF from dl09**
**Mean Depth=18.26**



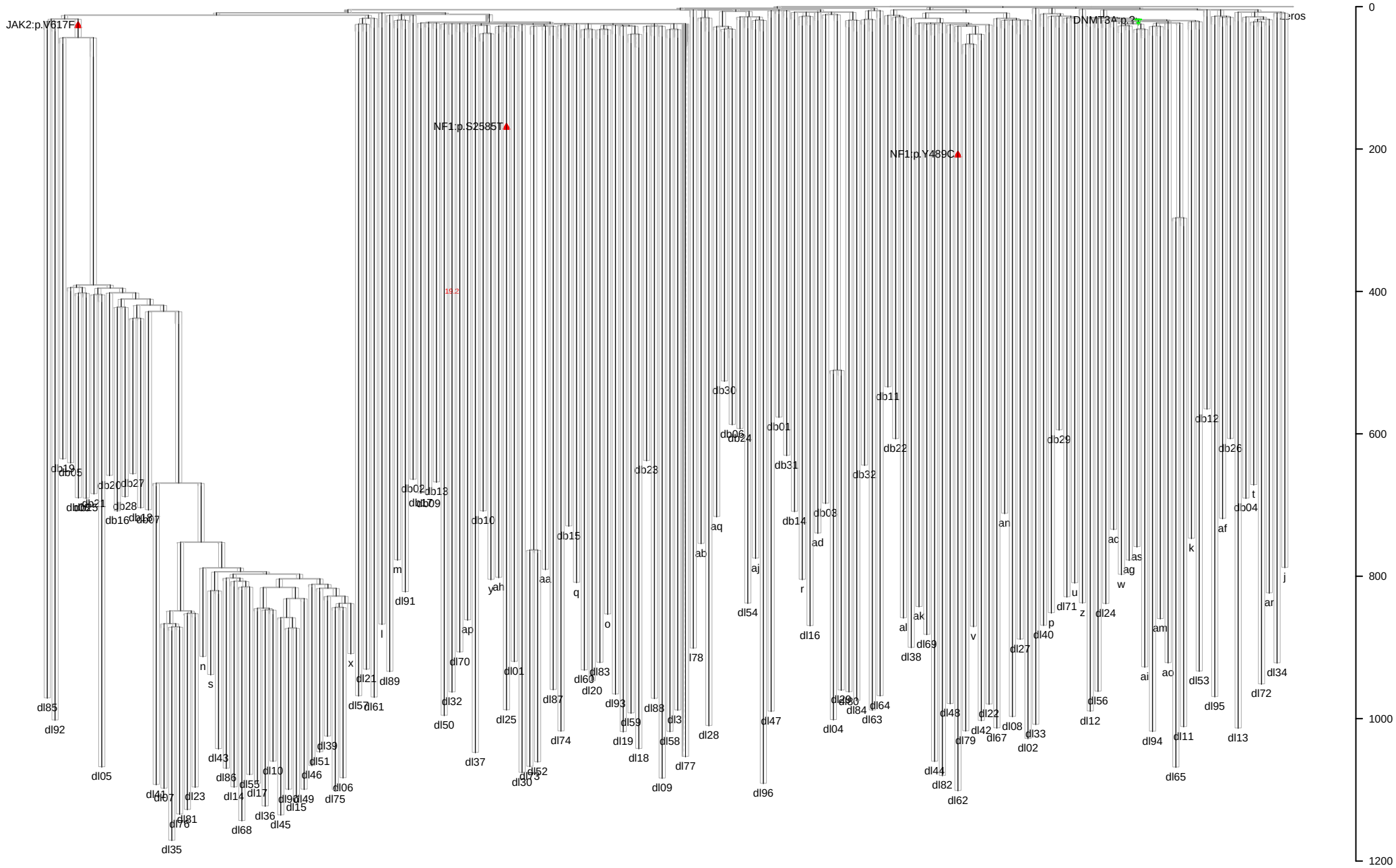
**PD5182: Annotated with VAF from dl58**
**Mean Depth=22.32**



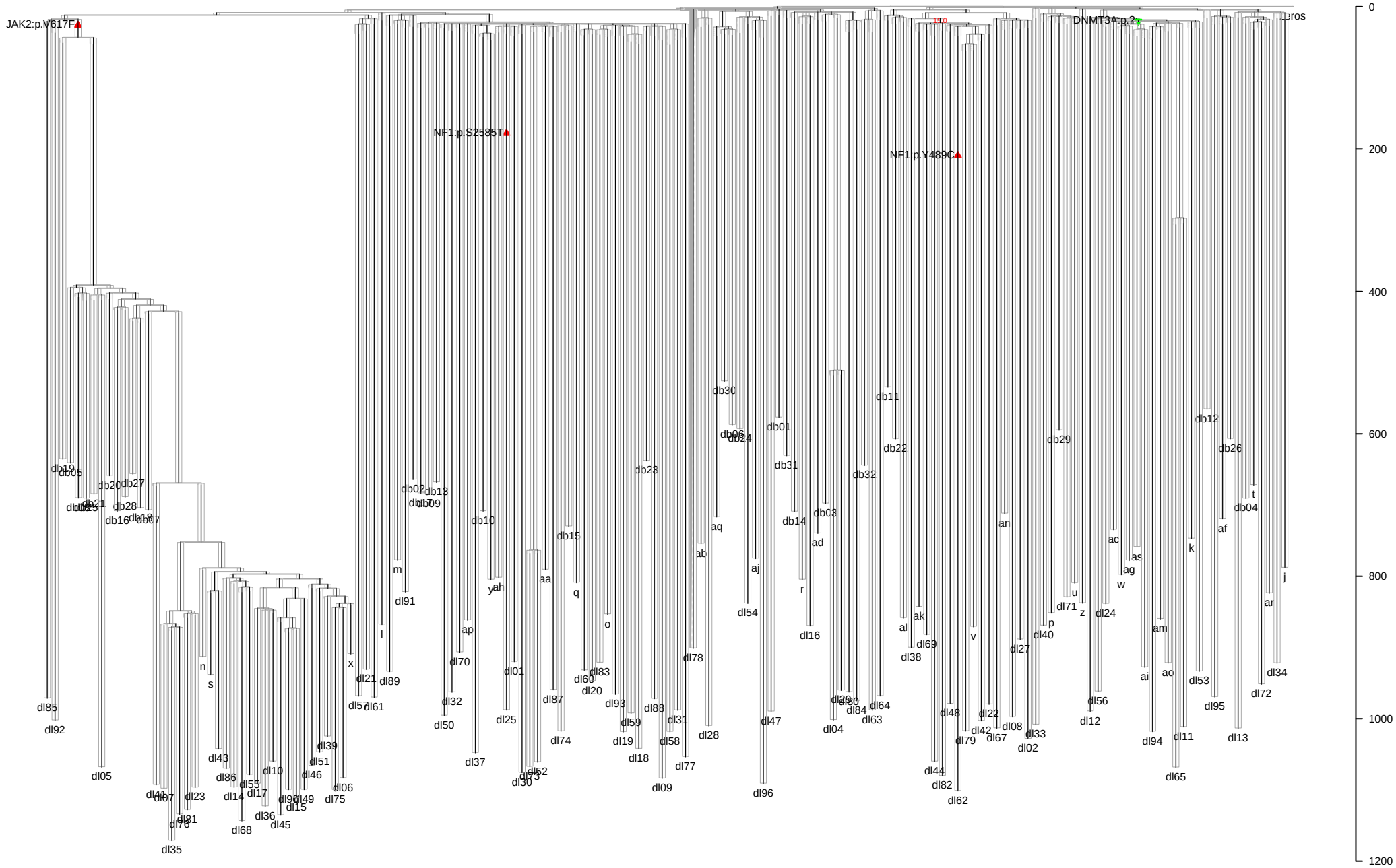
**PD5182: Annotated with VAF from dl31**
**Mean Depth=18.68**



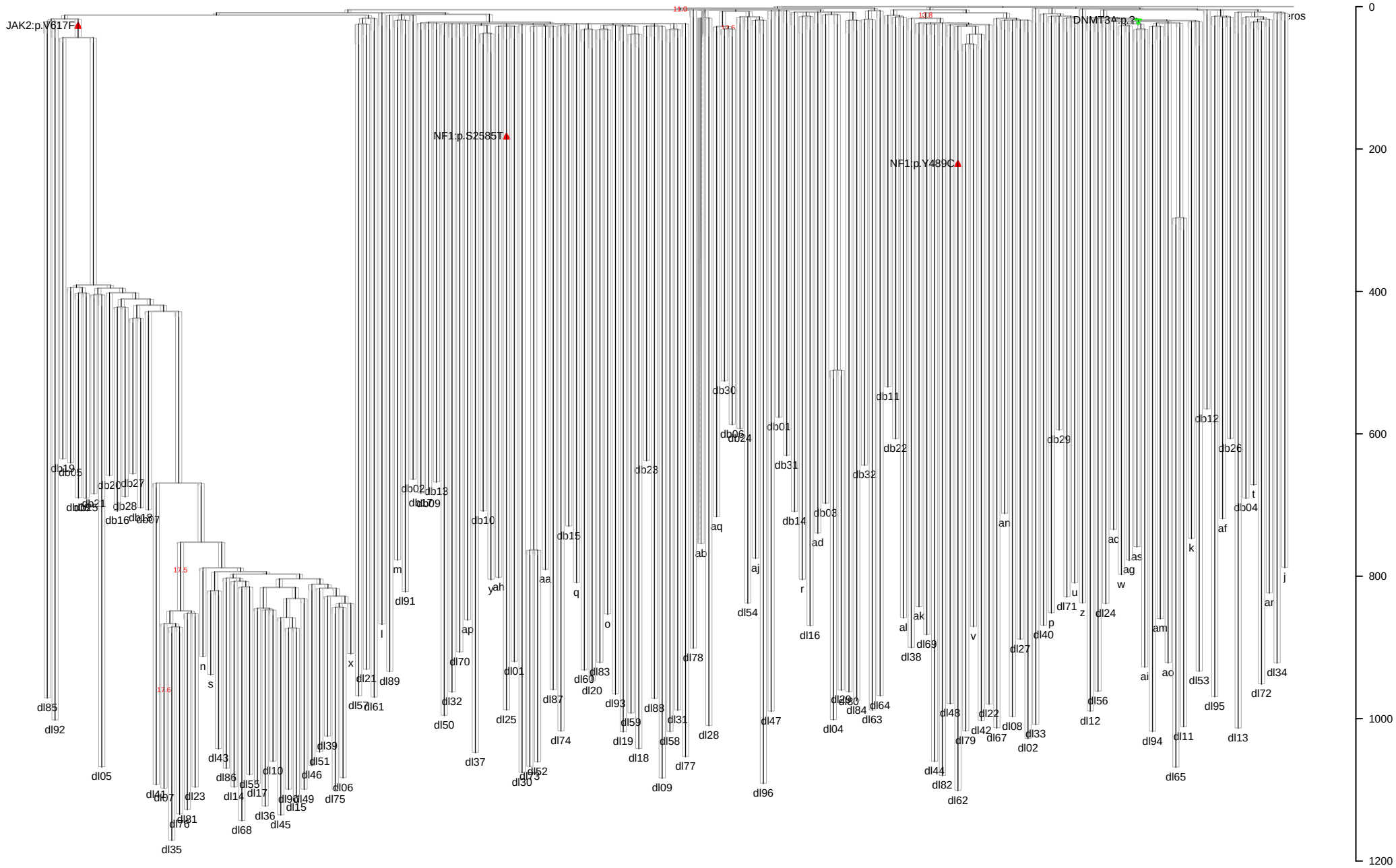
**PD5182: Annotated with VAF from dl77**
**Mean Depth=19.64**



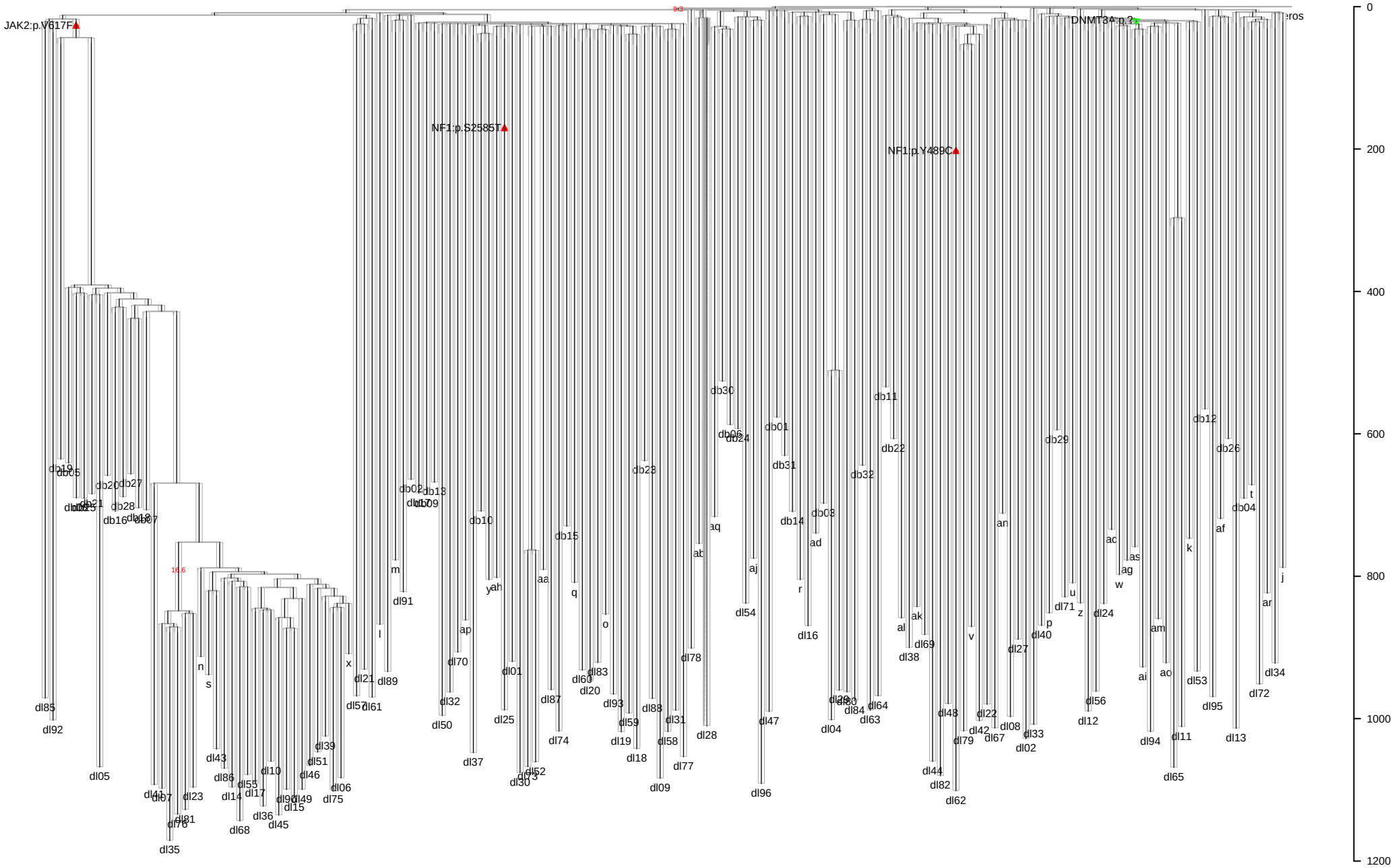
**PD5182: Annotated with VAF from dl78**
**Mean Depth=22.08**



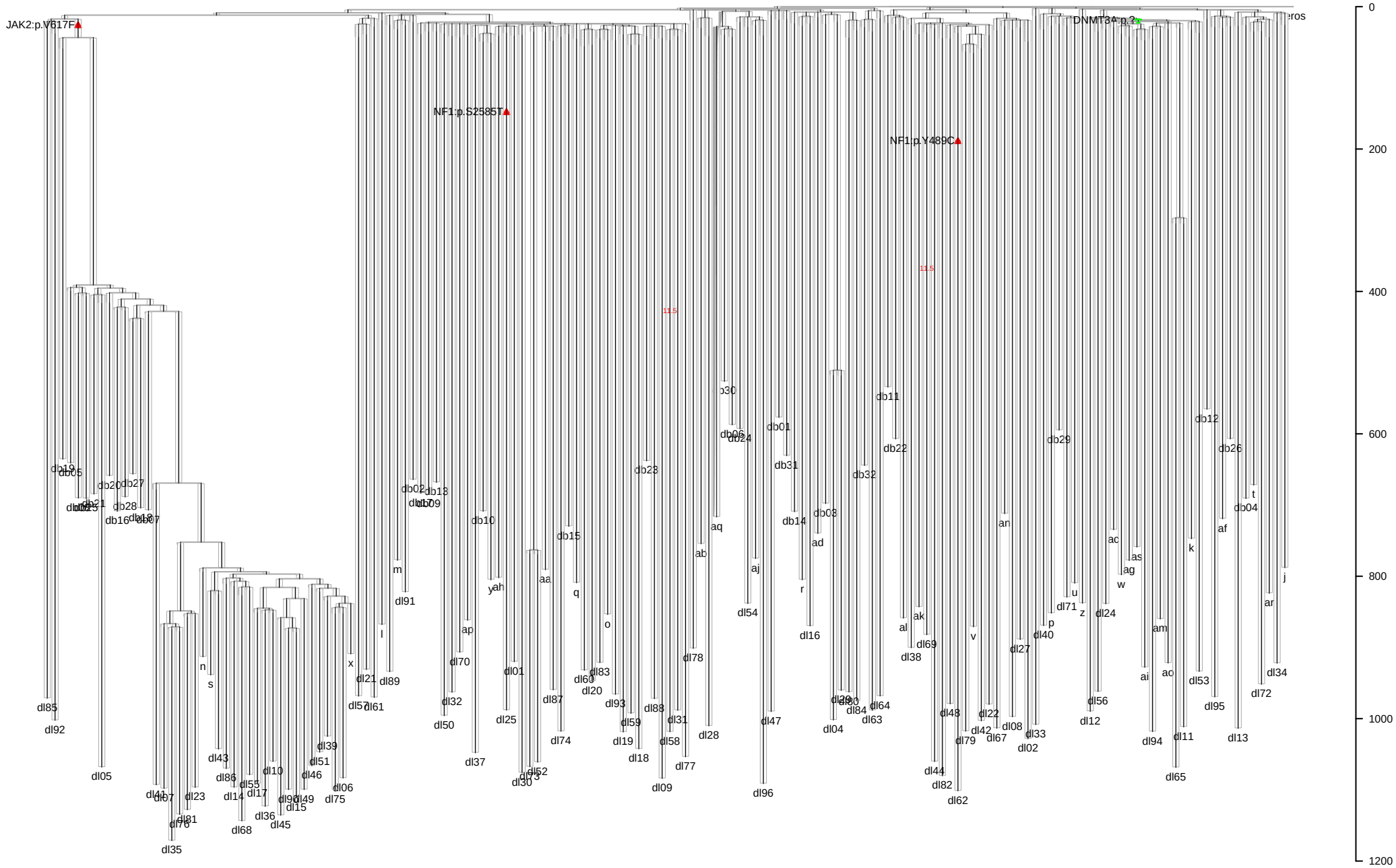
**PD5182: Annotated with VAF from ab**
**Mean Depth=18.75**



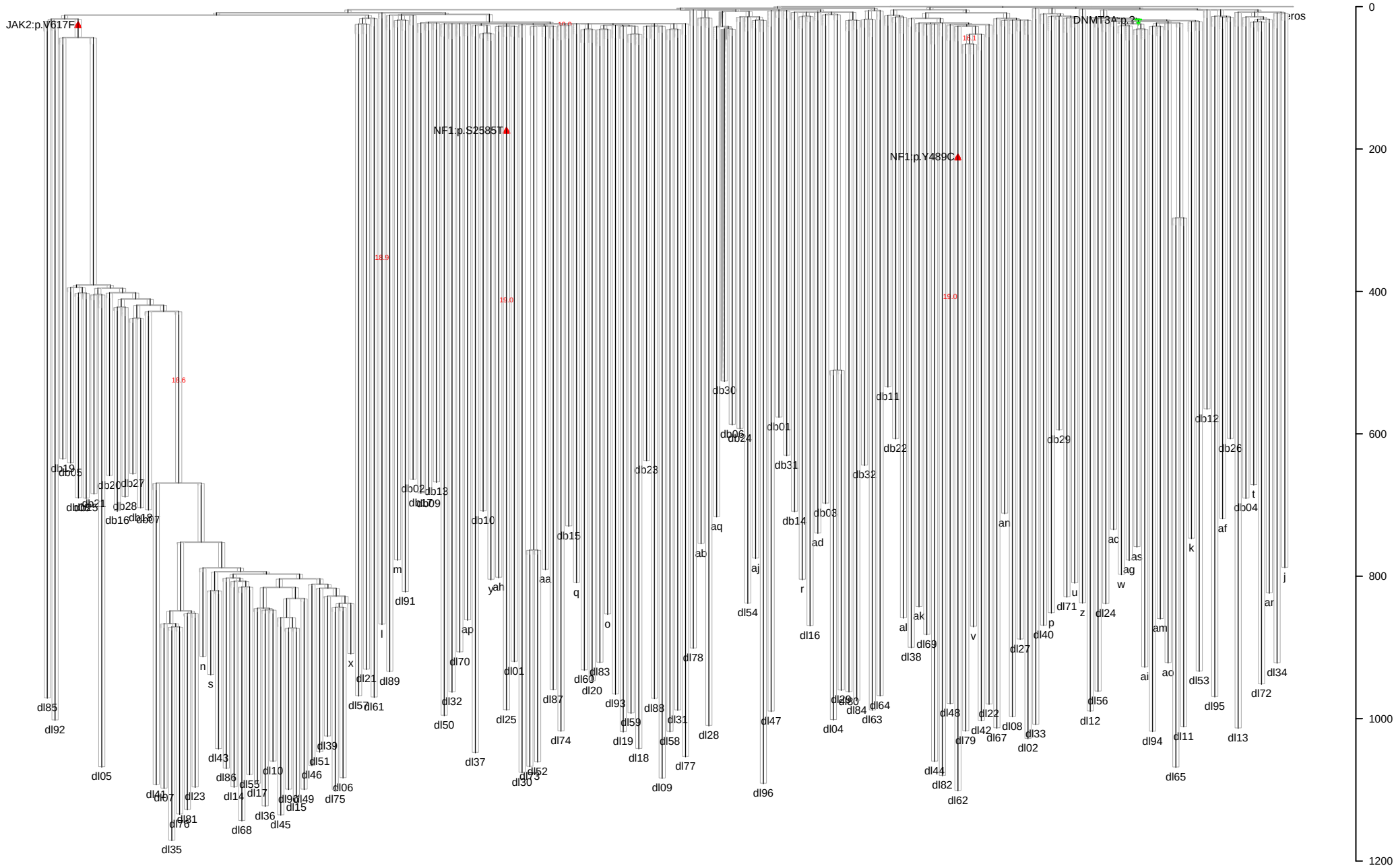
**PD5182: Annotated with VAF from dl28**
**Mean Depth=17.89**



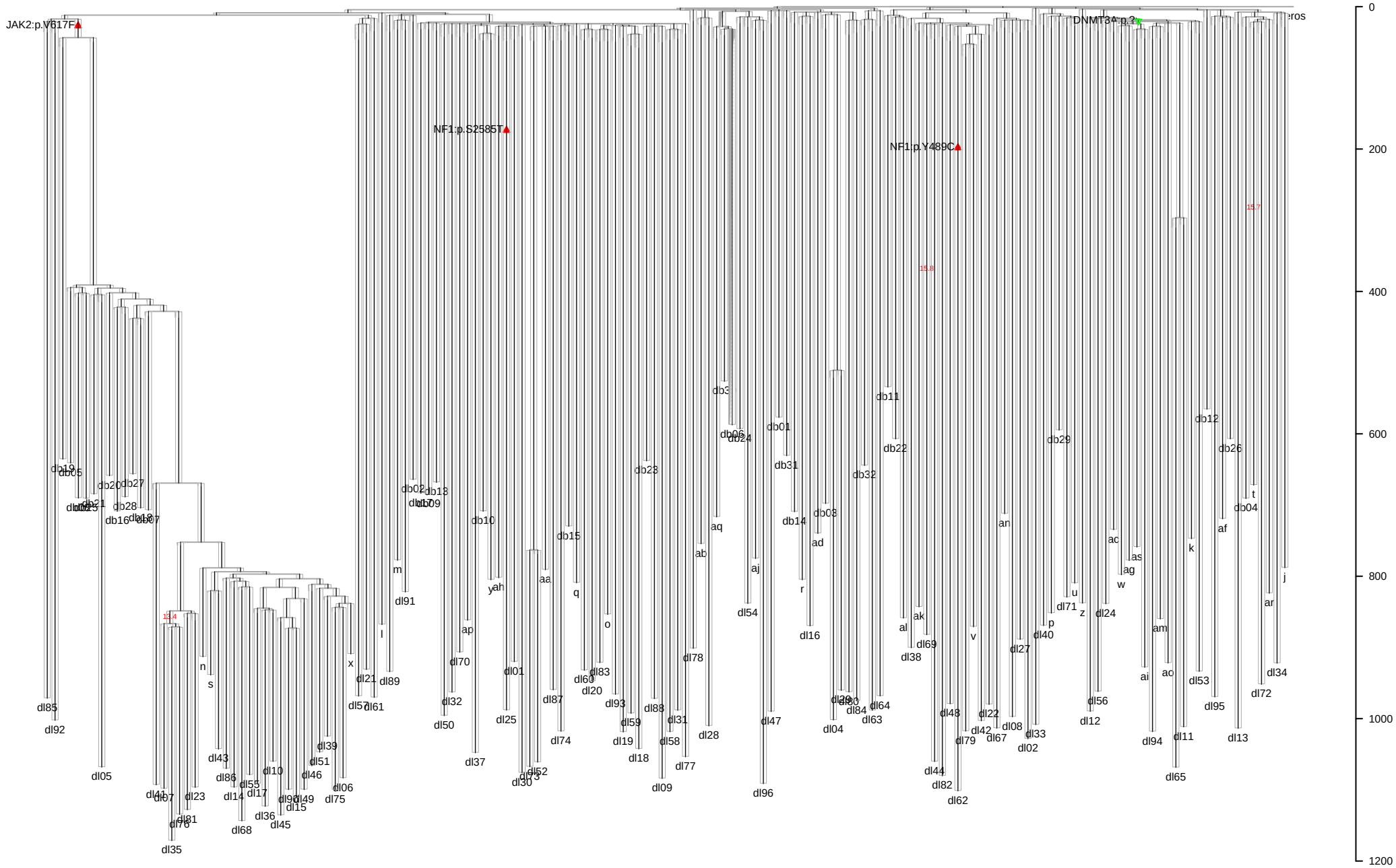
**PD5182: Annotated with VAF from aq**
**Mean Depth=11.87**



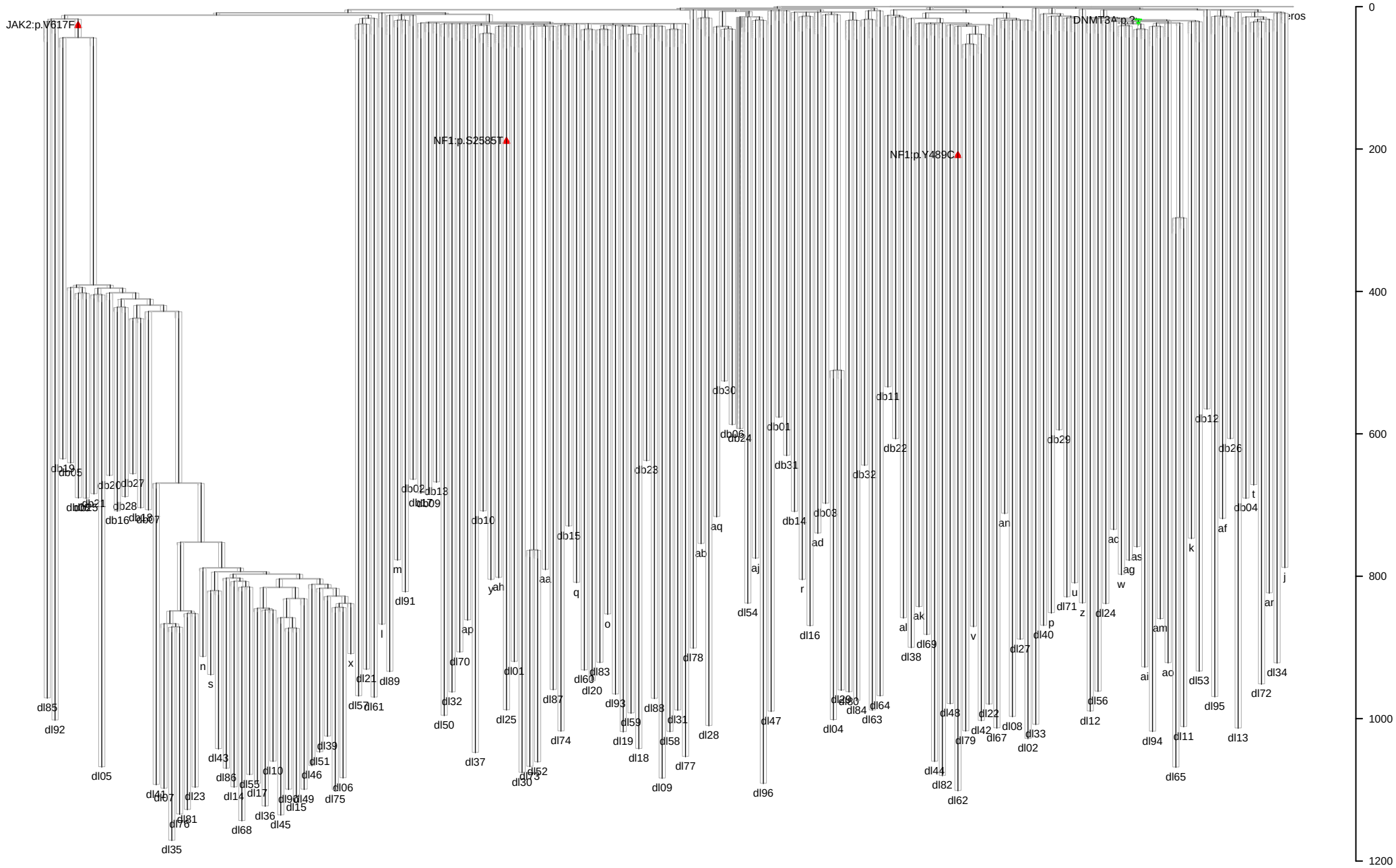
**PD5182: Annotated with VAF from db30**
**Mean Depth=19.44**



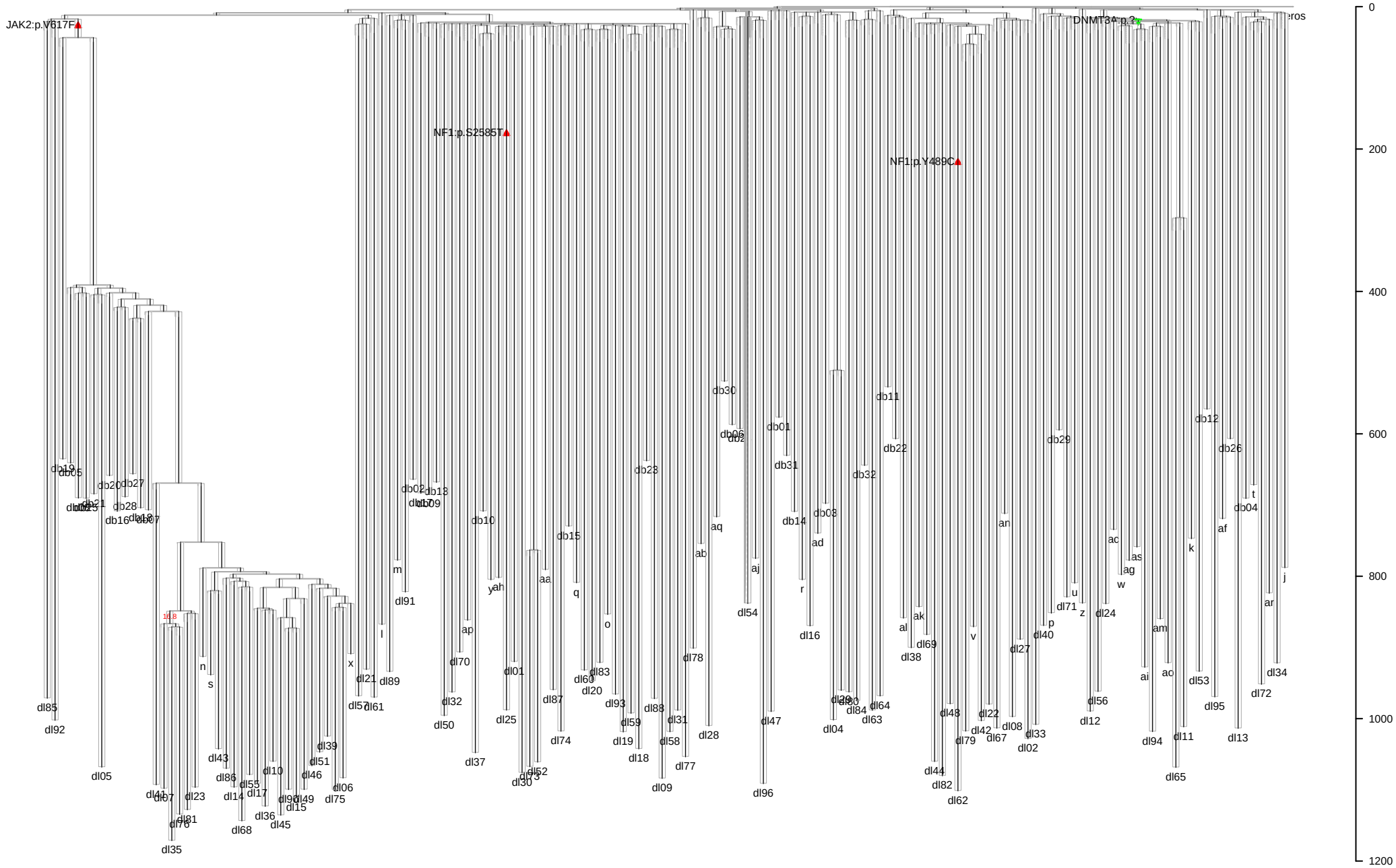
**PD5182: Annotated with VAF from db06**
**Mean Depth=16.20**



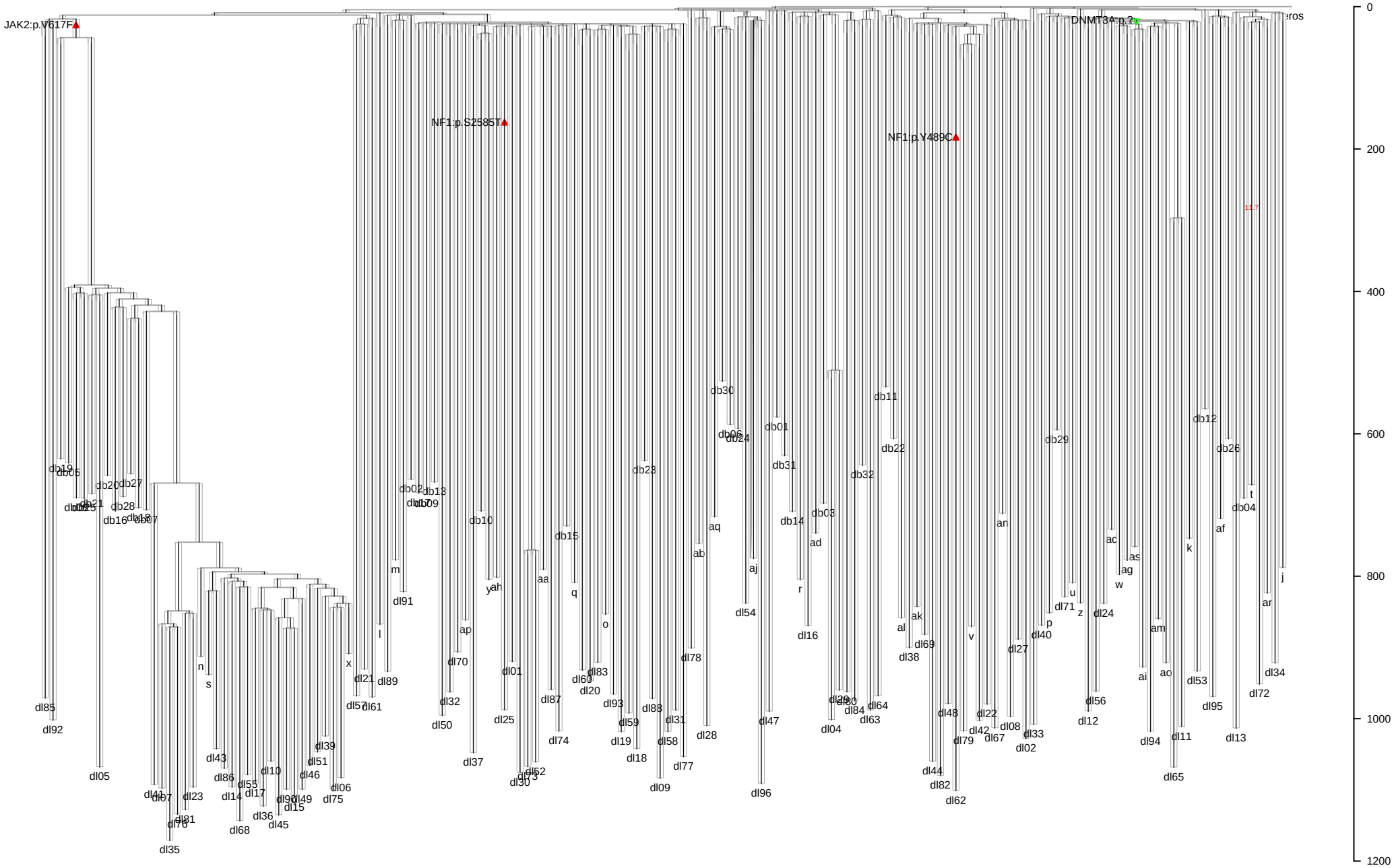
**PD5182: Annotated with VAF from db24**
**Mean Depth=18.38**



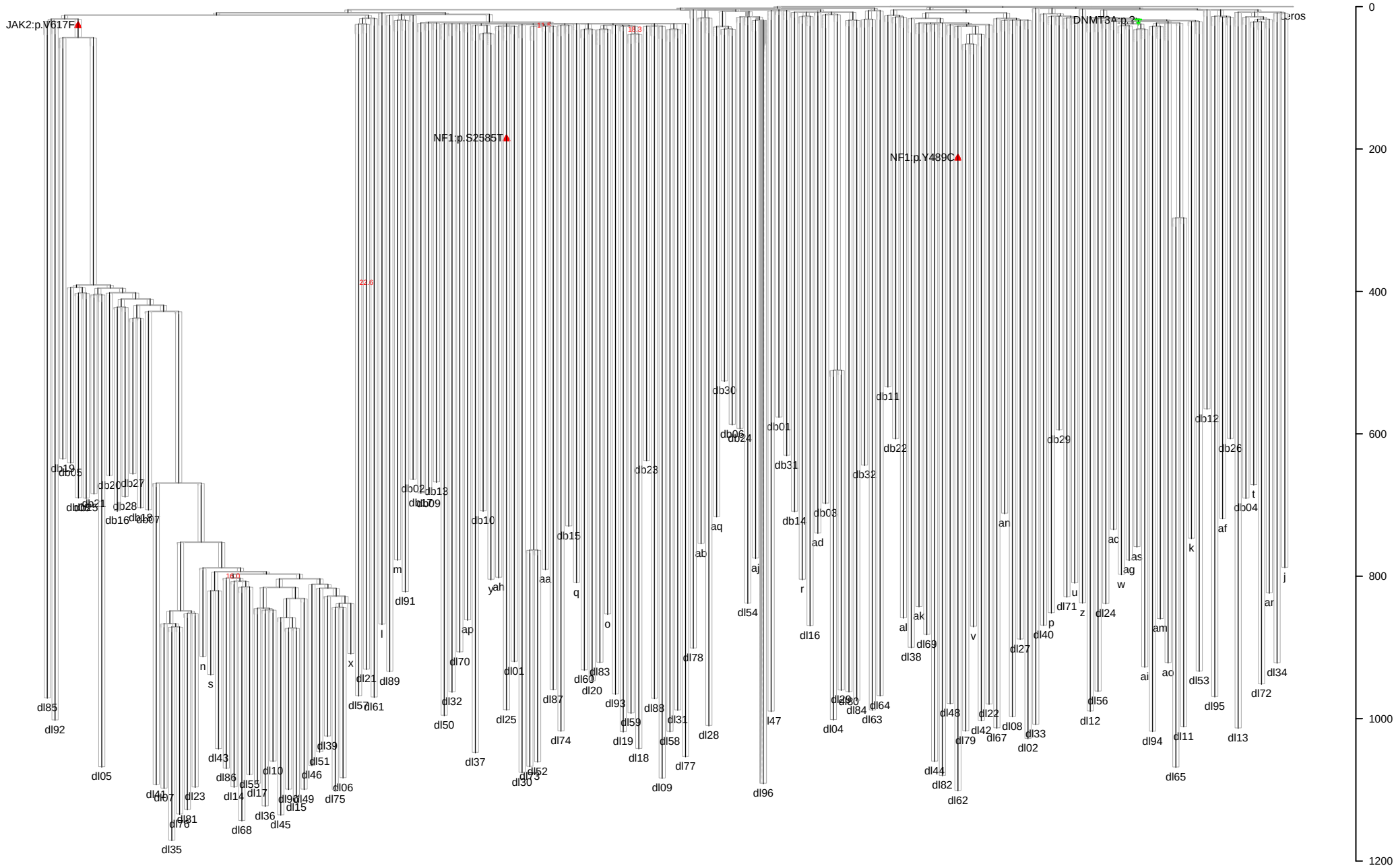
**PD5182: Annotated with VAF from dl54**
**Mean Depth=20.00**



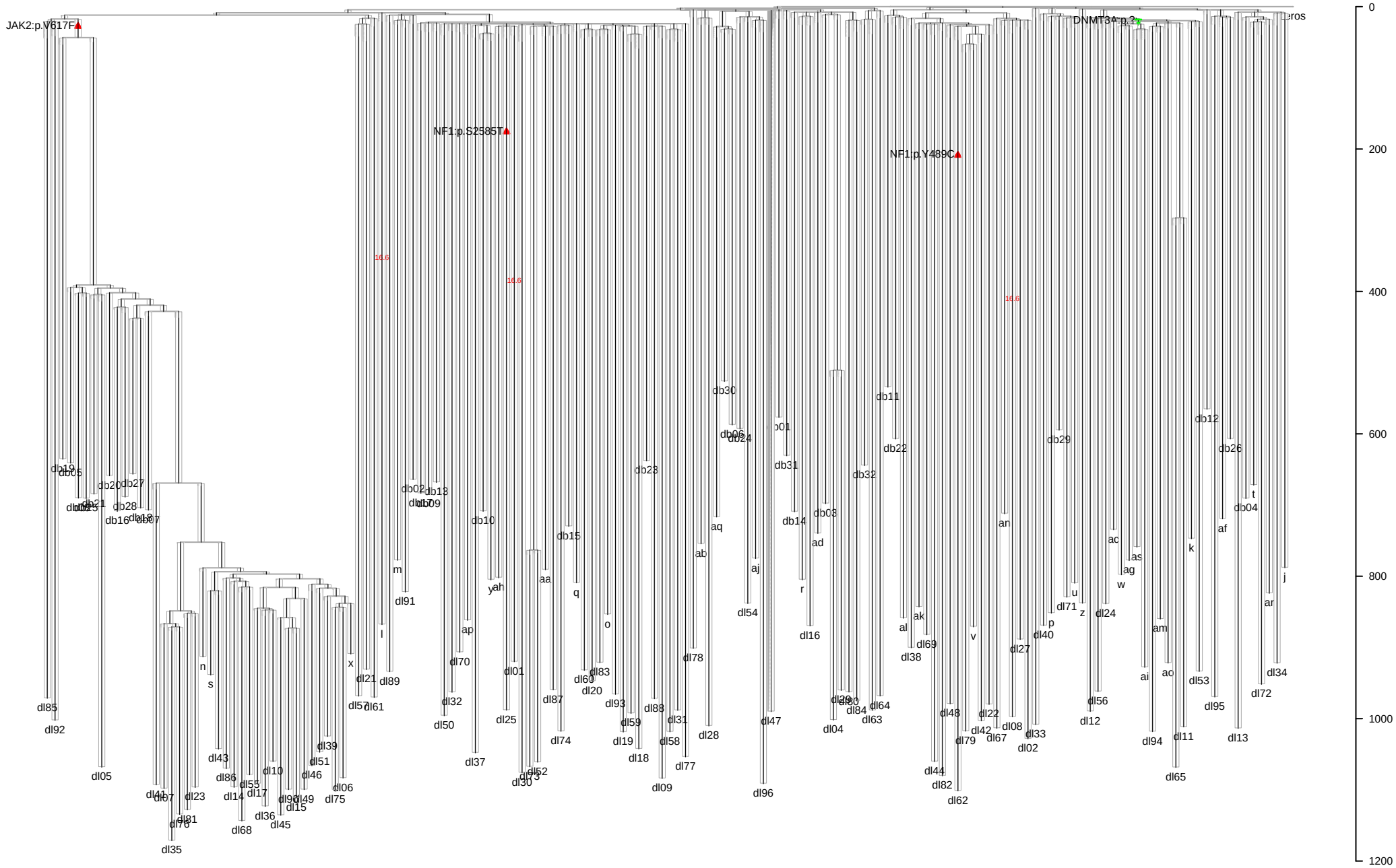
**PD5182: Annotated with VAF from aj**
**Mean Depth=12.27**



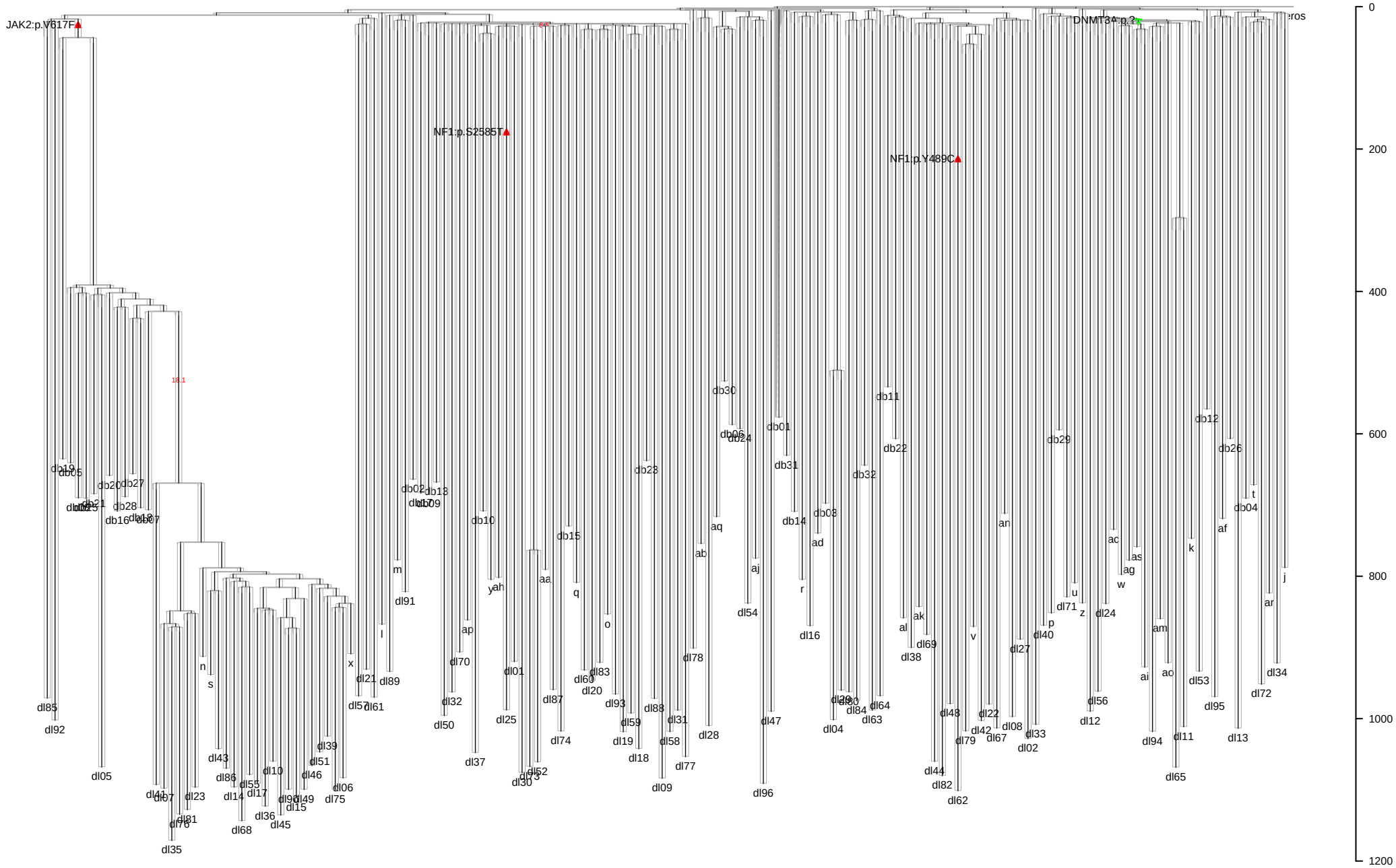
**PD5182: Annotated with VAF from dl96**
**Mean Depth=23.17**



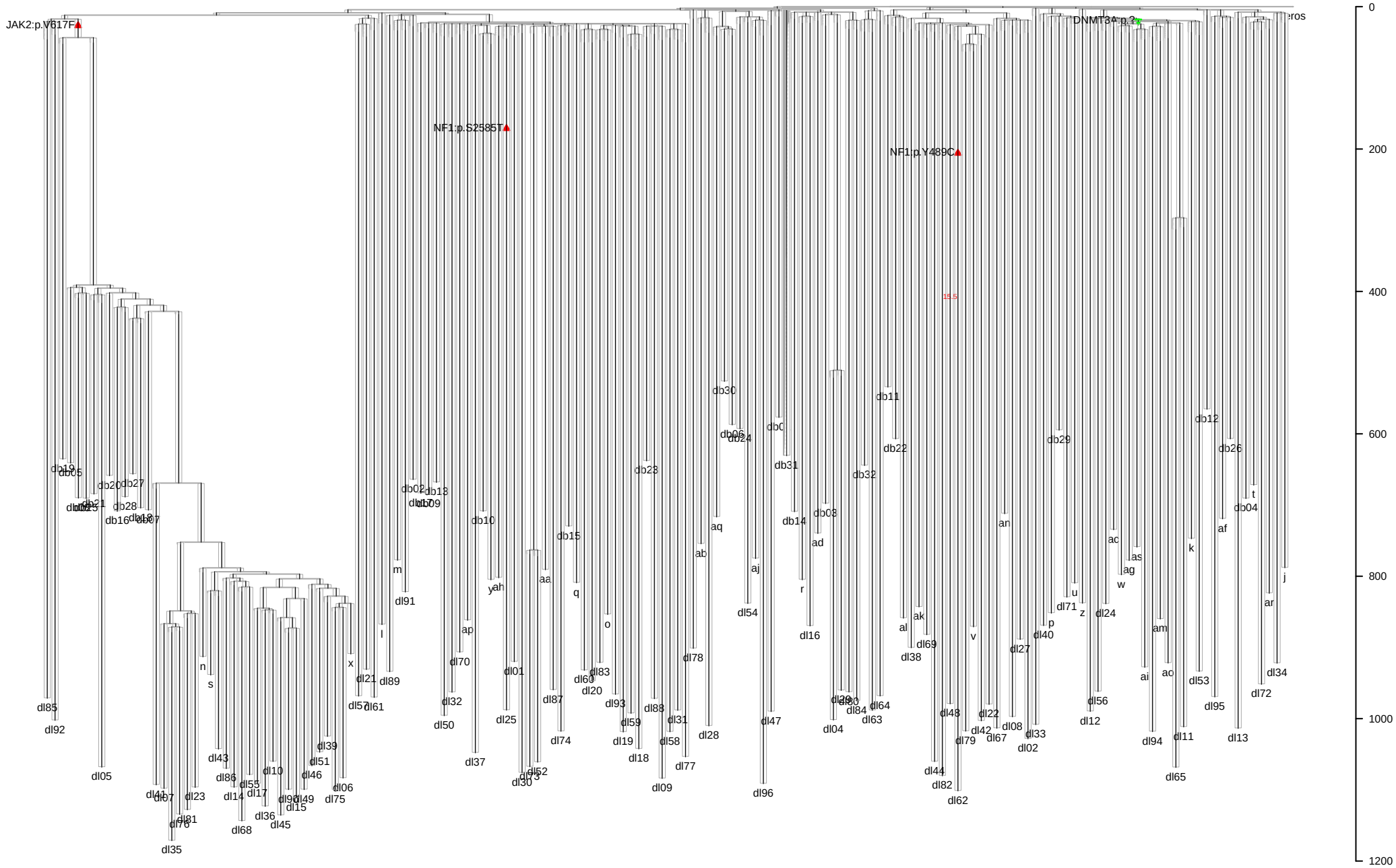
**PD5182: Annotated with VAF from dl47**
**Mean Depth=17.08**



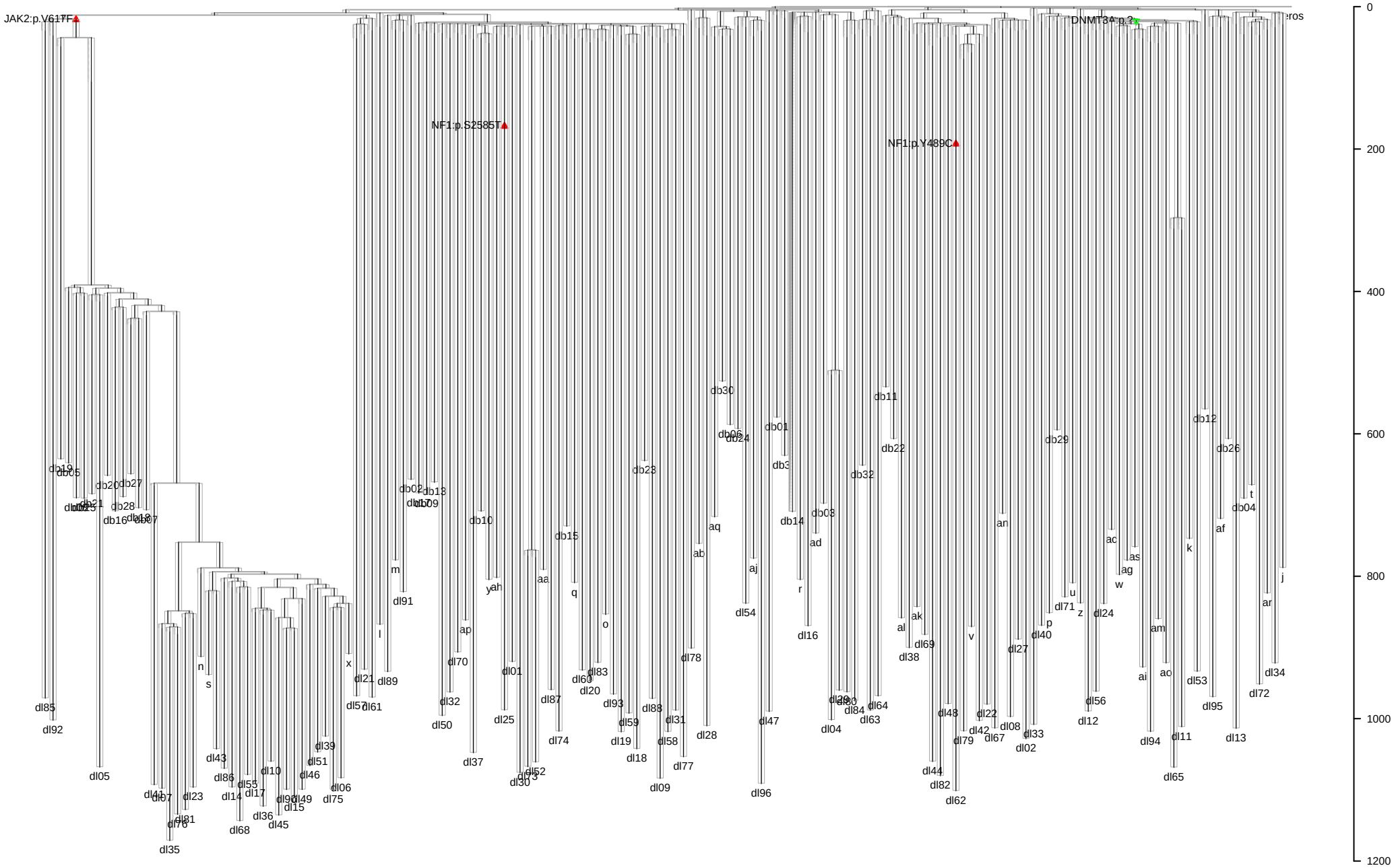
**PD5182: Annotated with VAF from db01**
**Mean Depth=19.28**



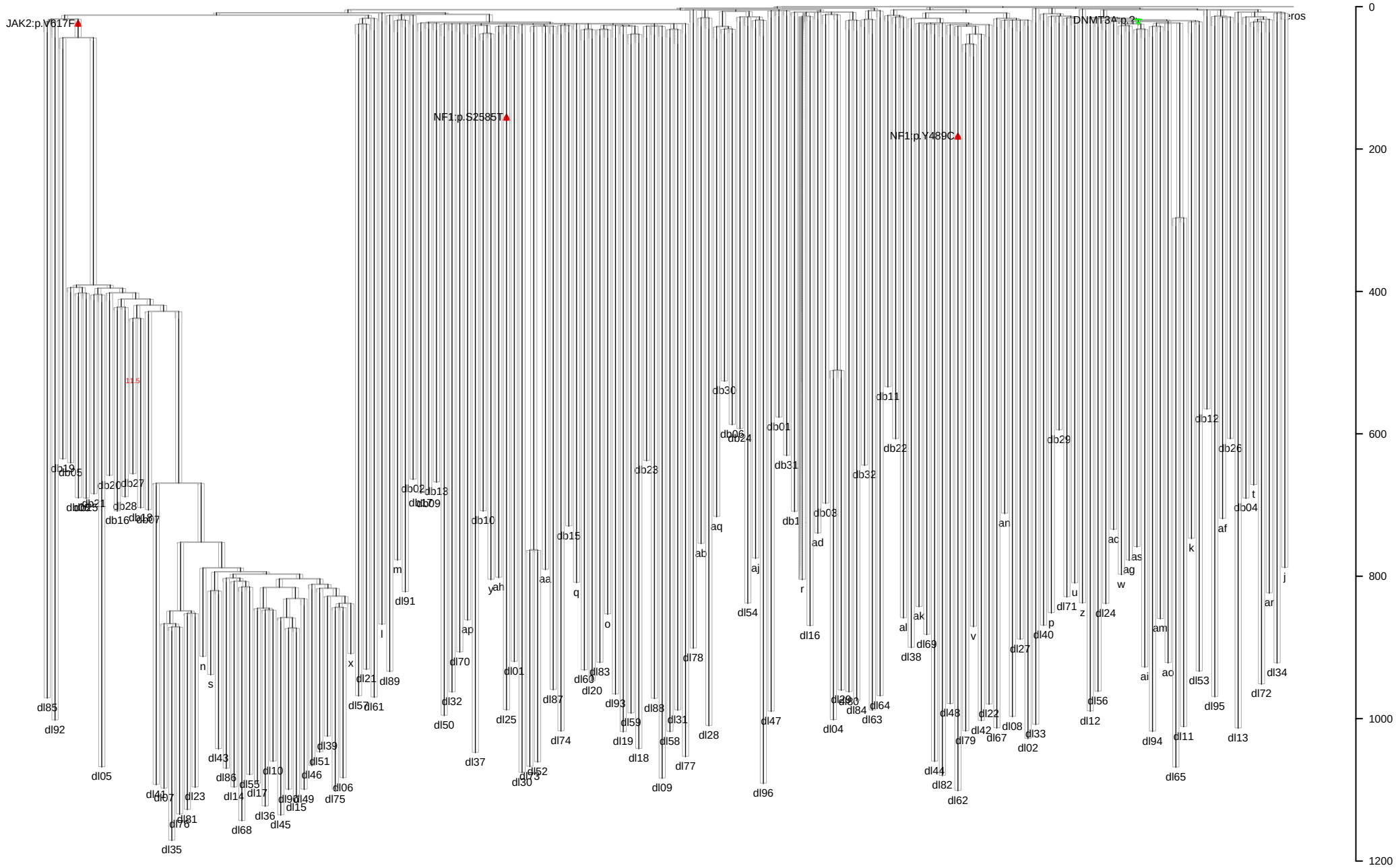
**PD5182: Annotated with VAF from db31**
**Mean Depth=15.92**



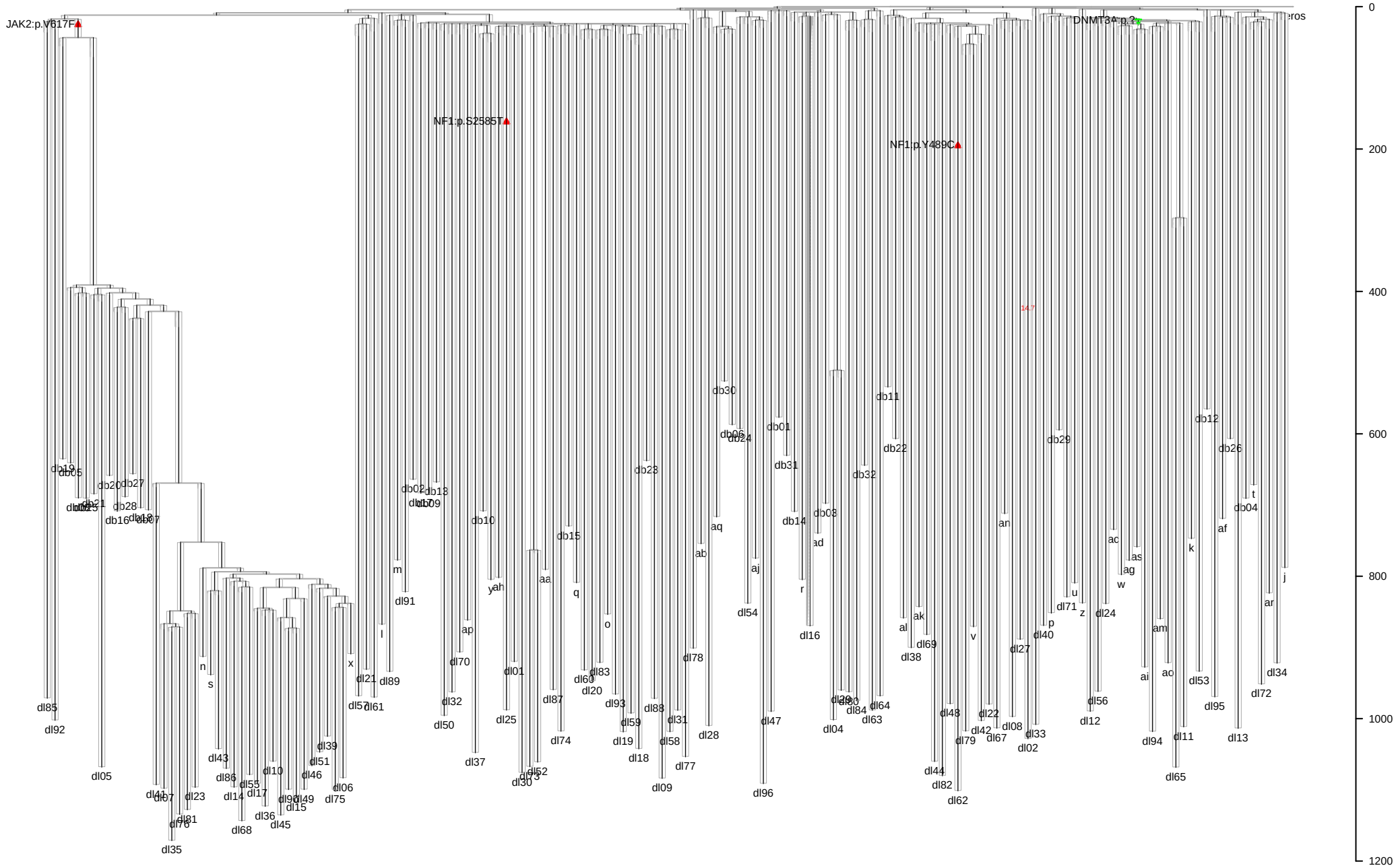
**PD5182: Annotated with VAF from db14**
**Mean Depth=15.76**



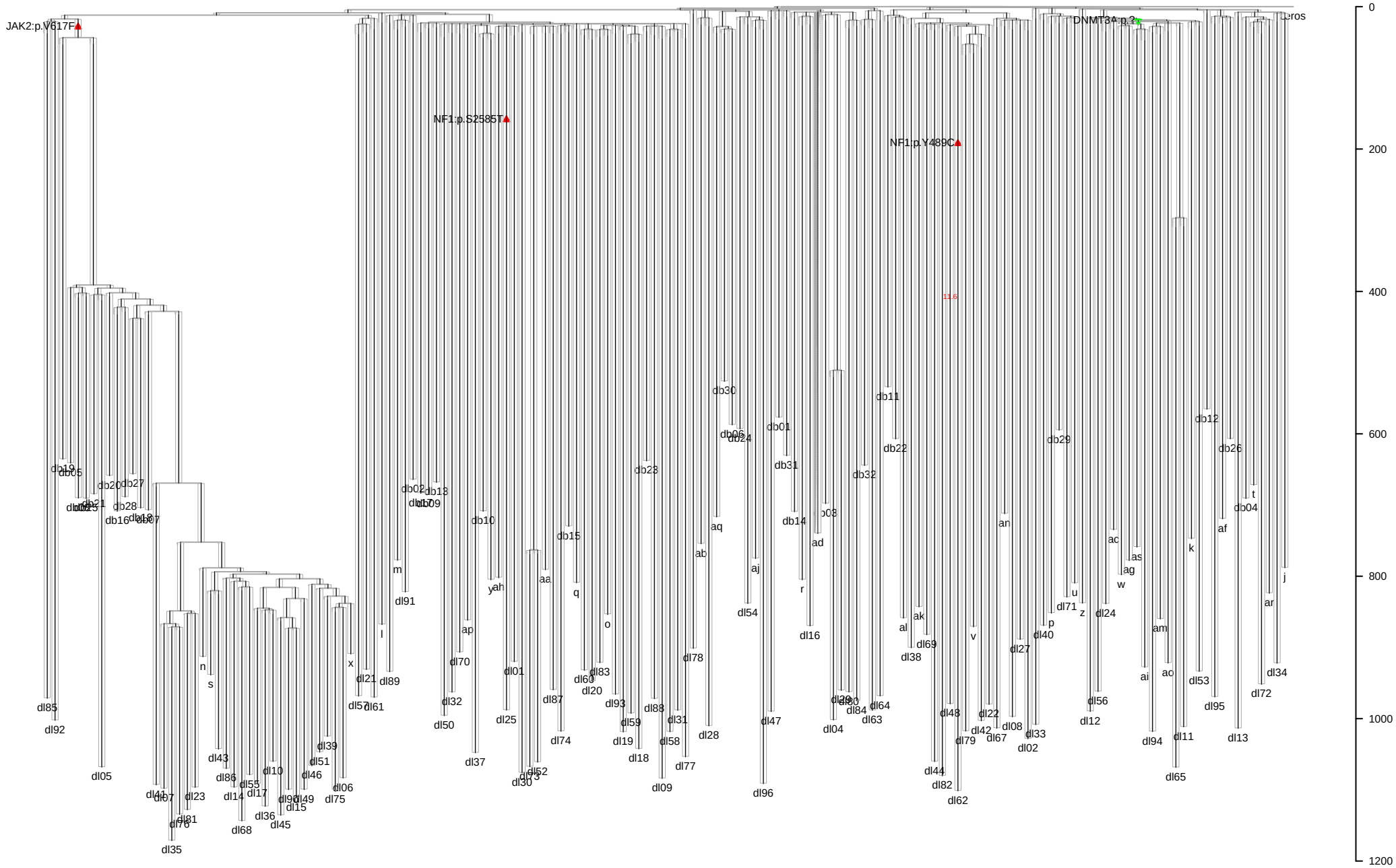
**PD5182: Annotated with VAF from r**
**Mean Depth=12.21**



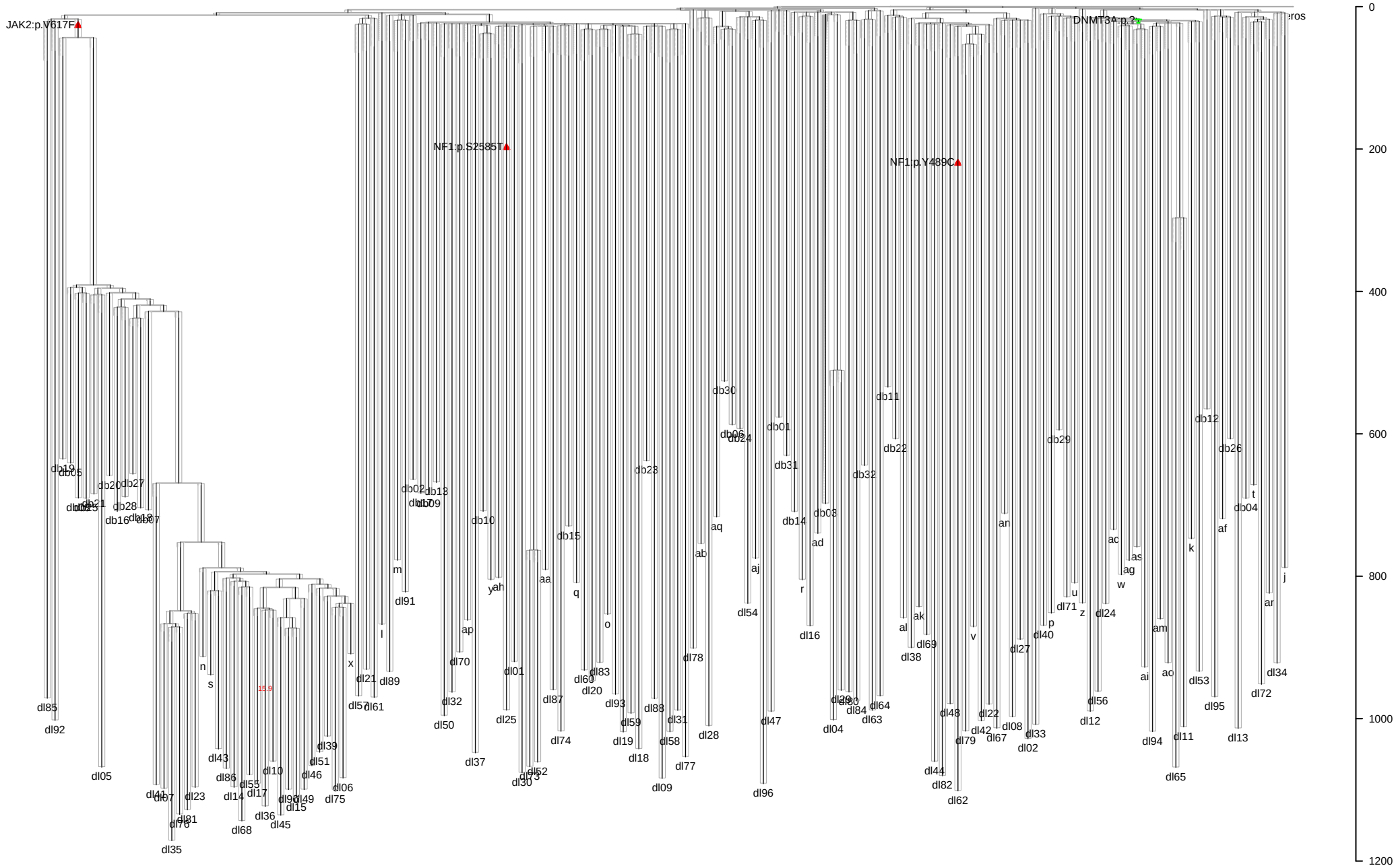
**PD5182: Annotated with VAF from dl16**
**Mean Depth=15.14**



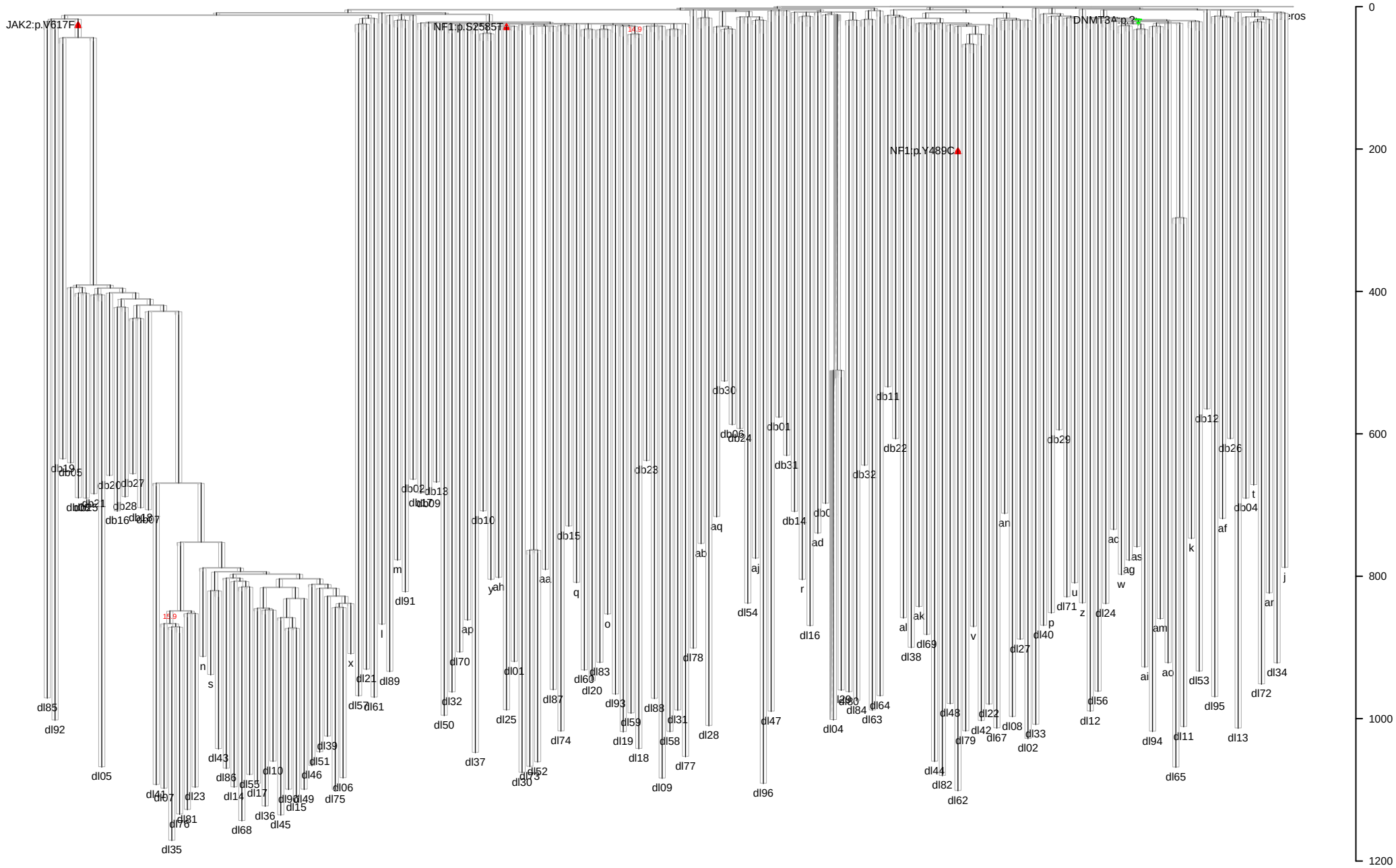
**PD5182: Annotated with VAF from ad**
**Mean Depth=11.96**



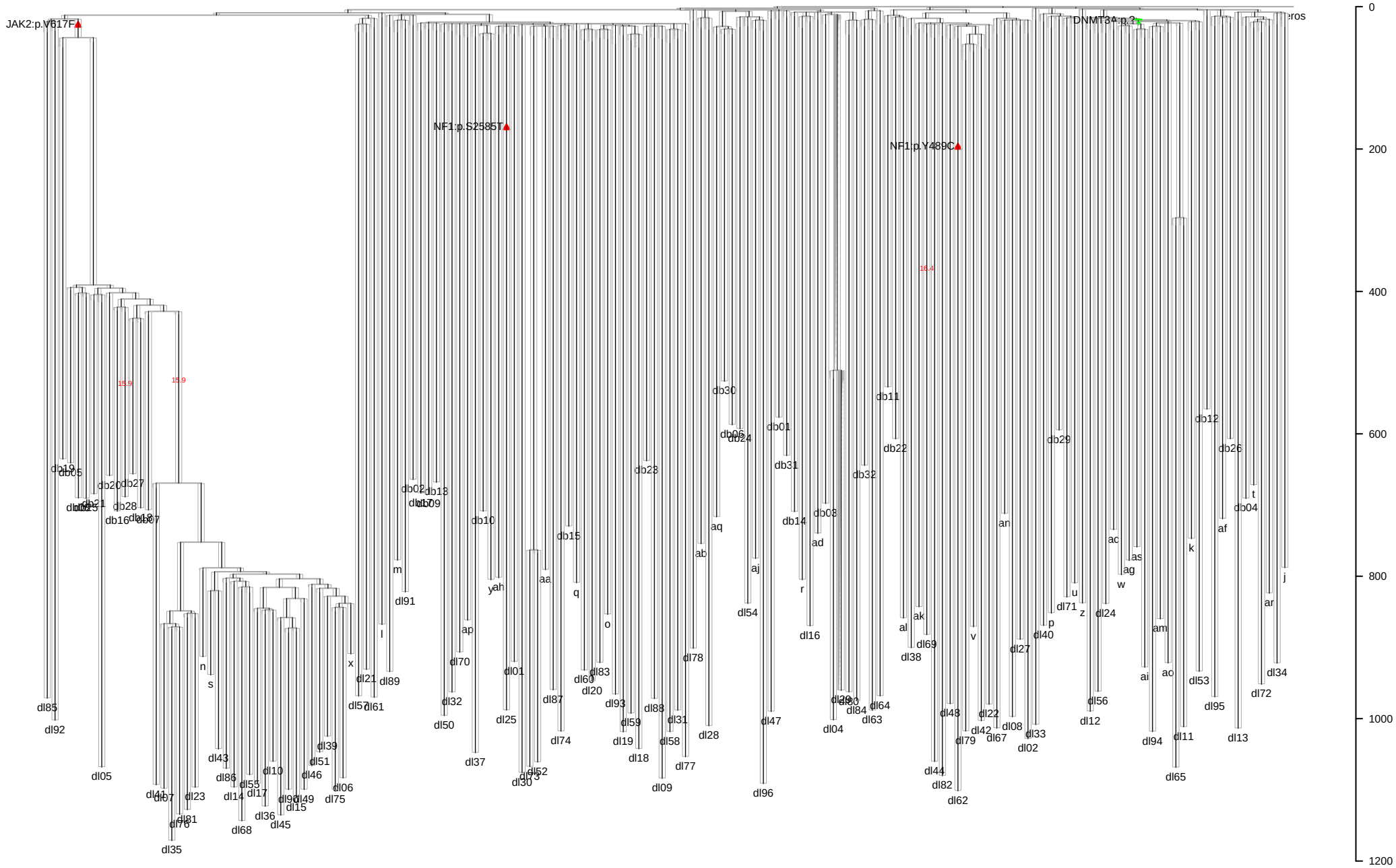
**PD5182: Annotated with VAF from db03**
**Mean Depth=16.60**



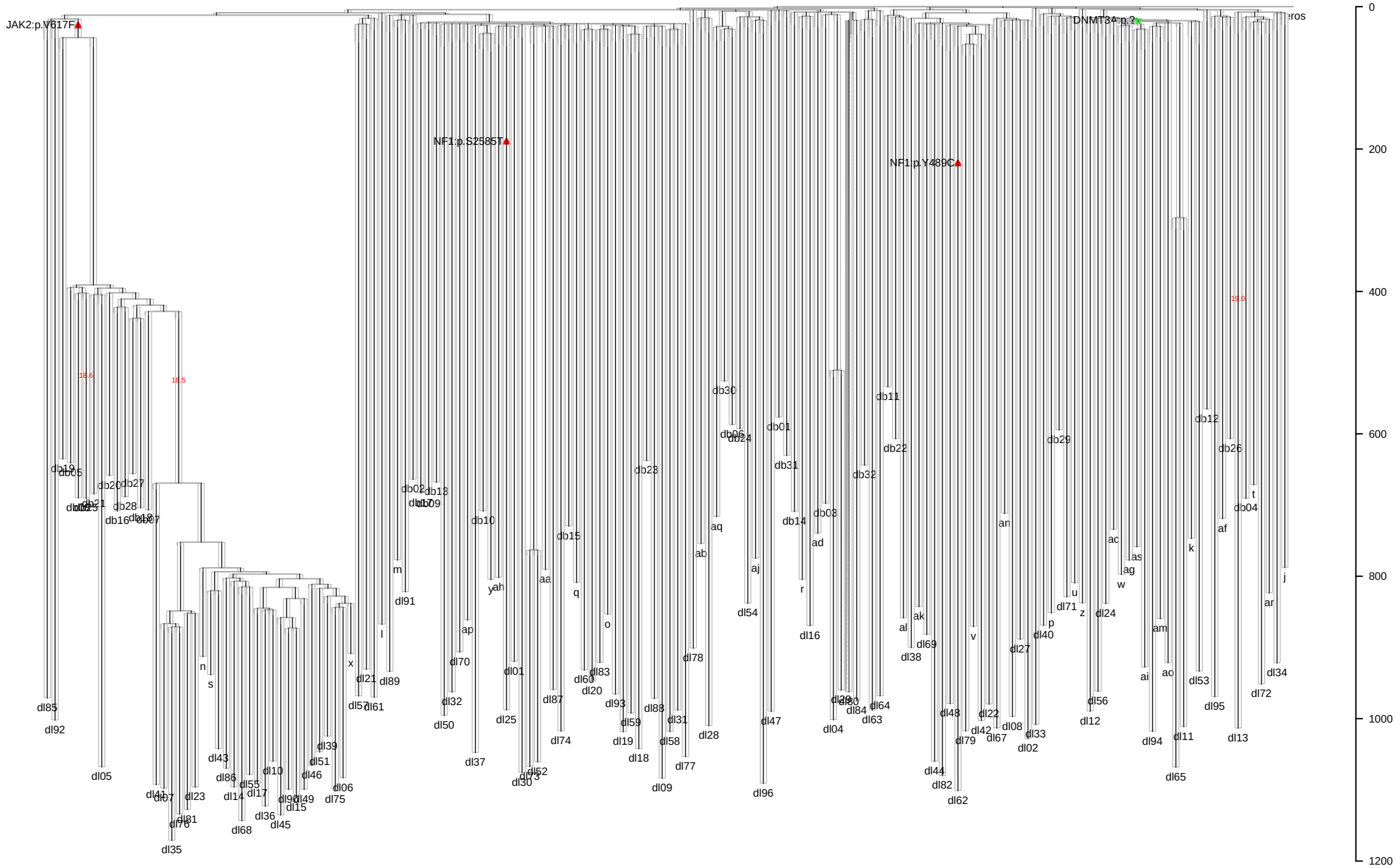
**PD5182: Annotated with VAF from dl04**
**Mean Depth=19.18**



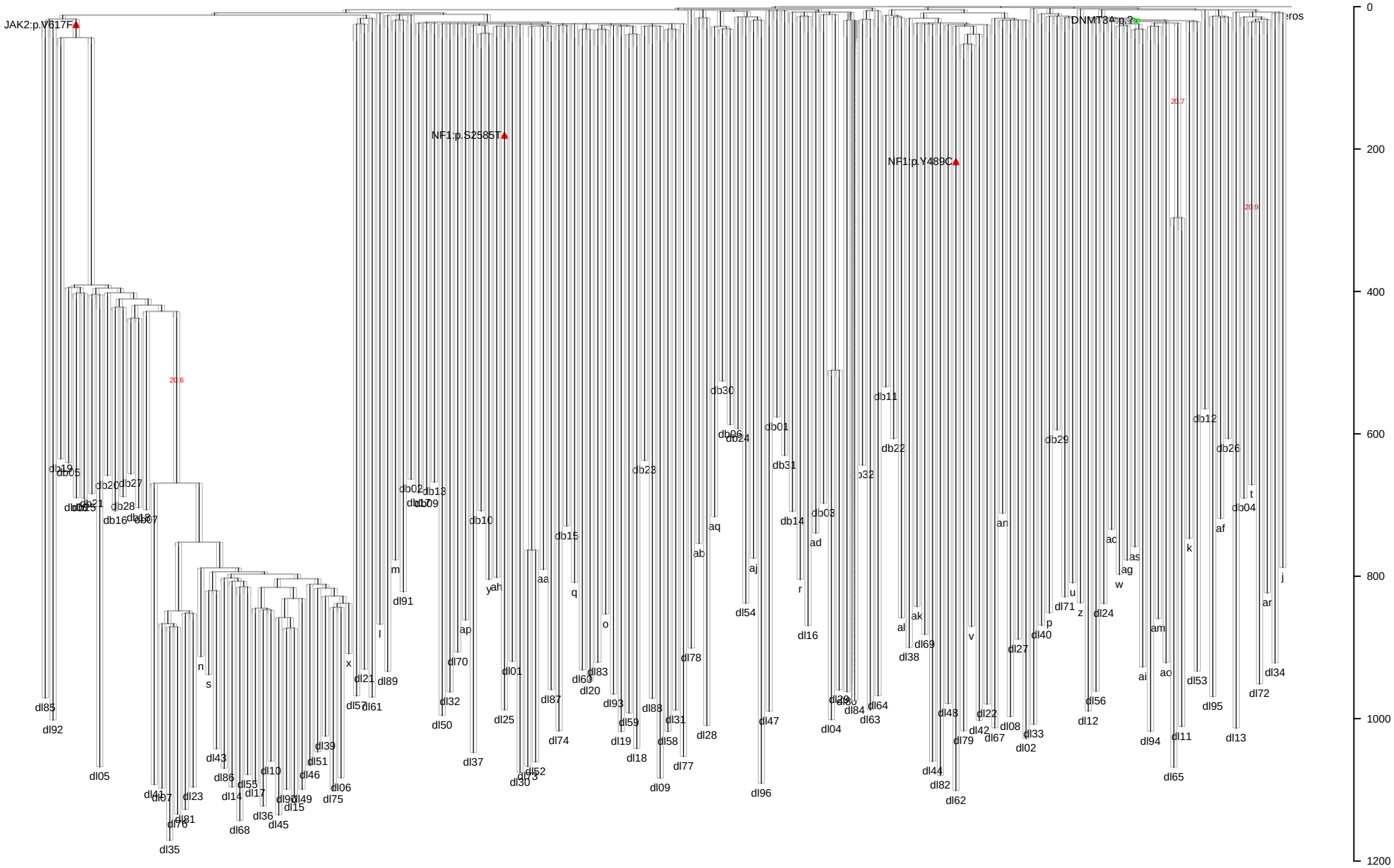
**PD5182: Annotated with VAF from dl29**
**Mean Depth=16.80**



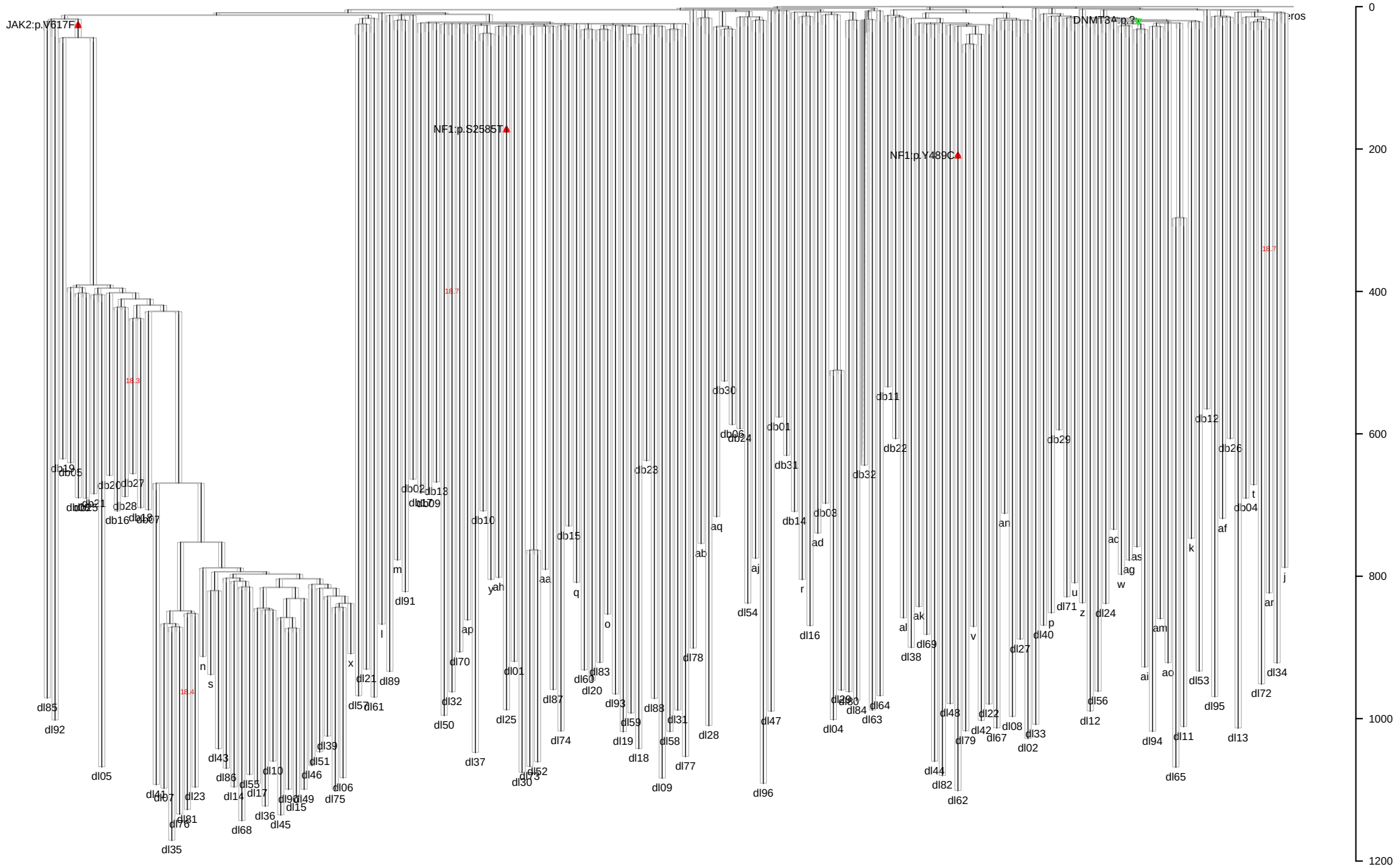
**PD5182: Annotated with VAF from dl80**
**Mean Depth=19.40**



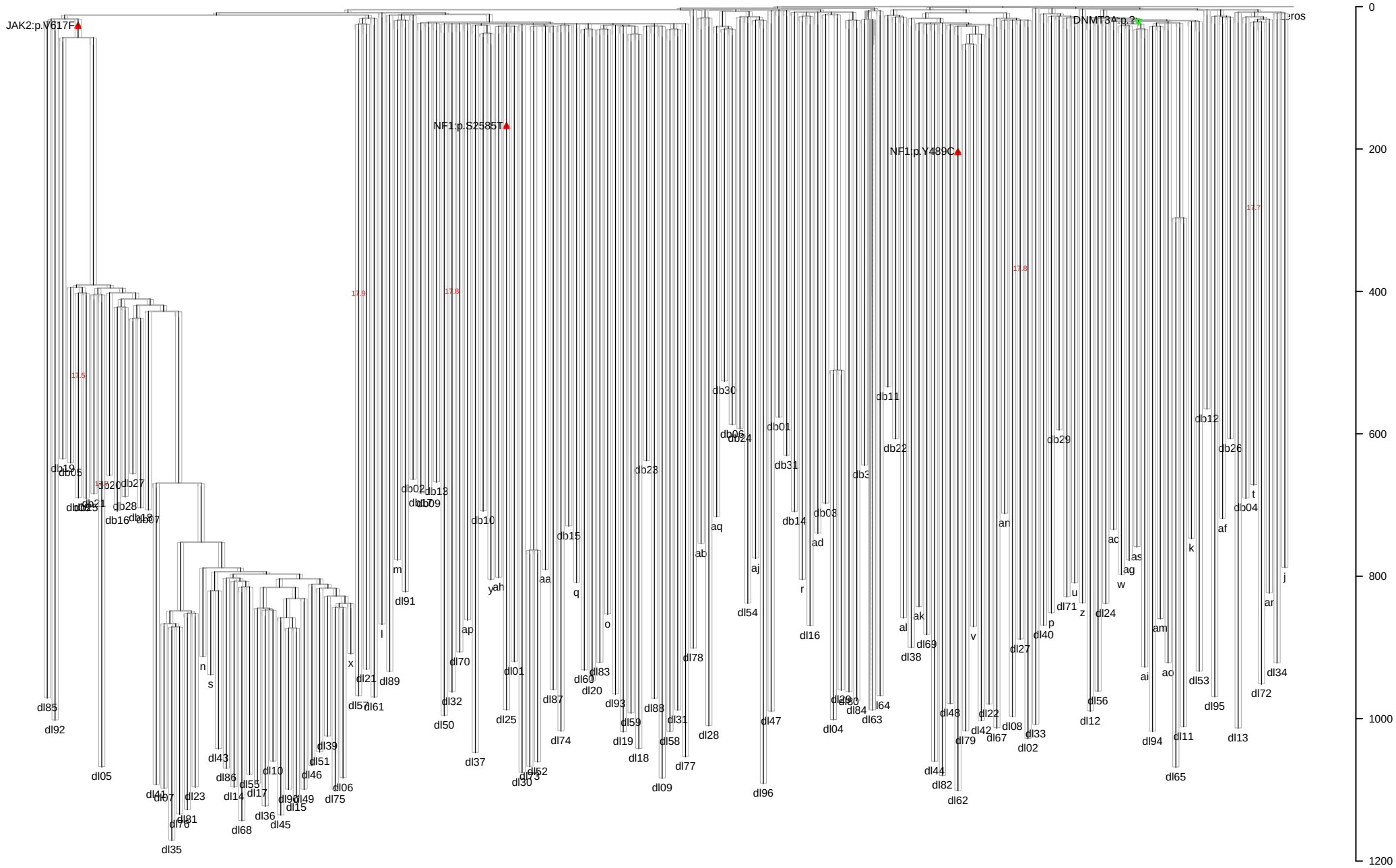
**PD5182: Annotated with VAF from dl84**
**Mean Depth=21.55**



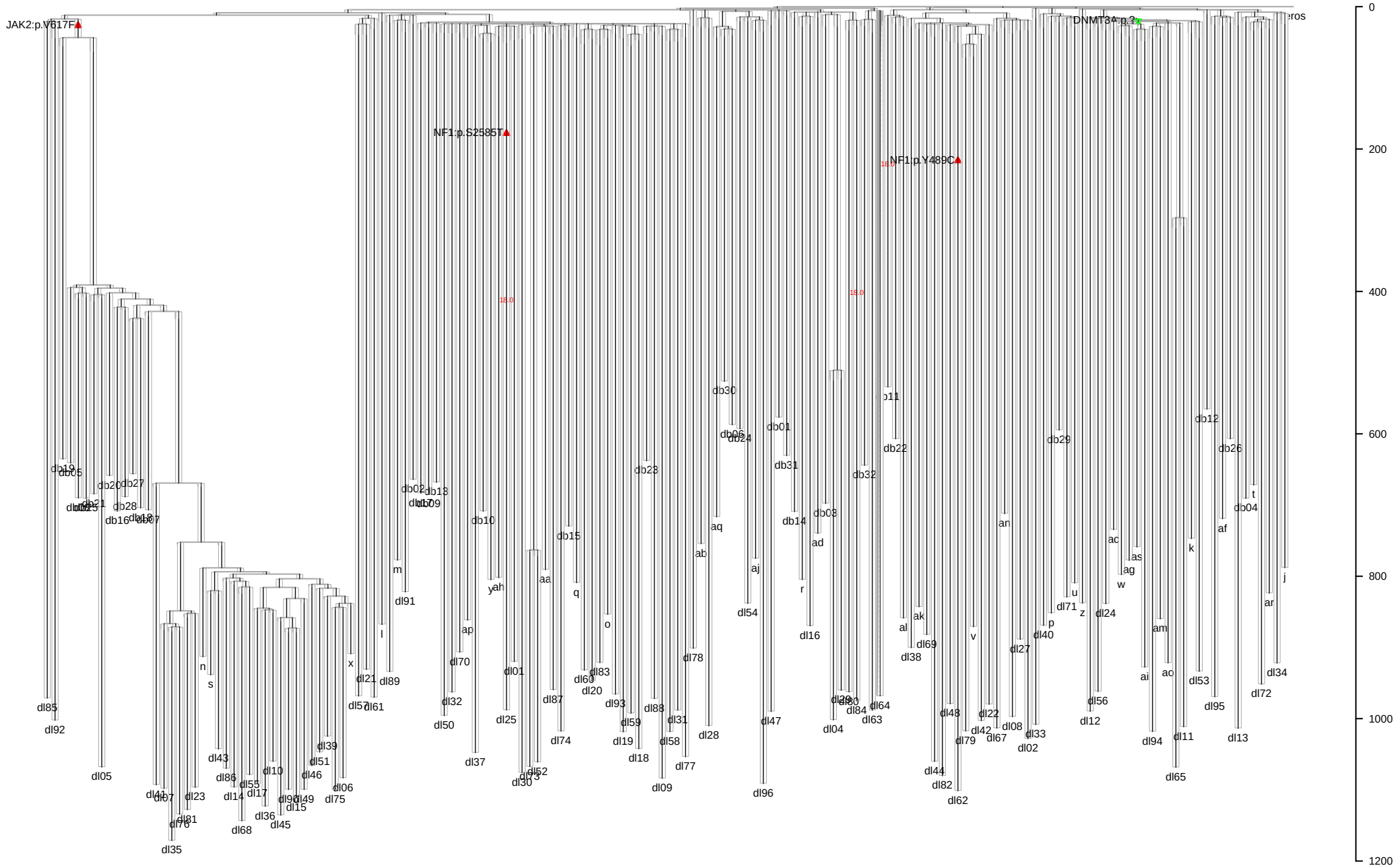
**PD5182: Annotated with VAF from db32**
**Mean Depth=19.19**



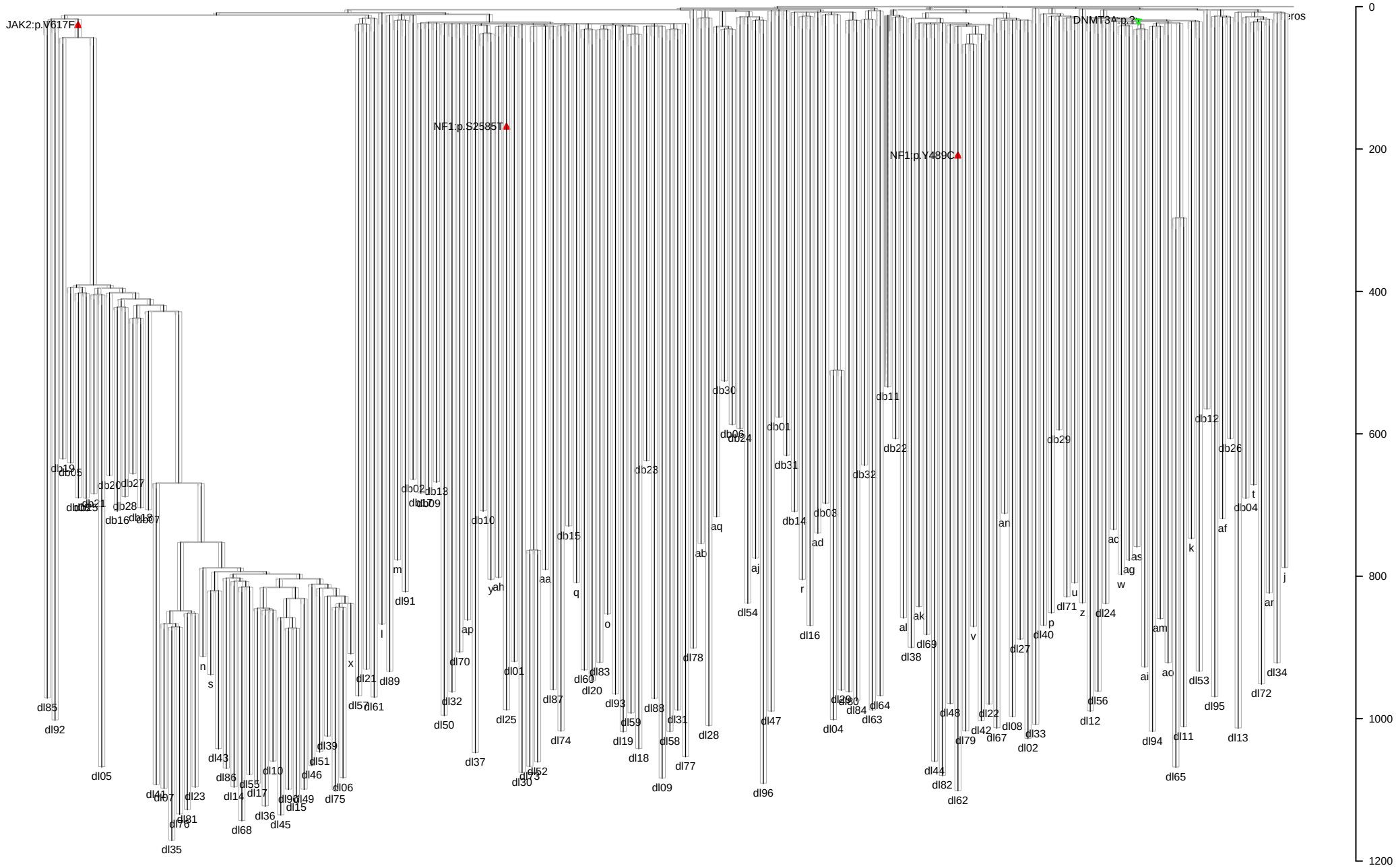
**PD5182: Annotated with VAF from dl63**
**Mean Depth=18.31**



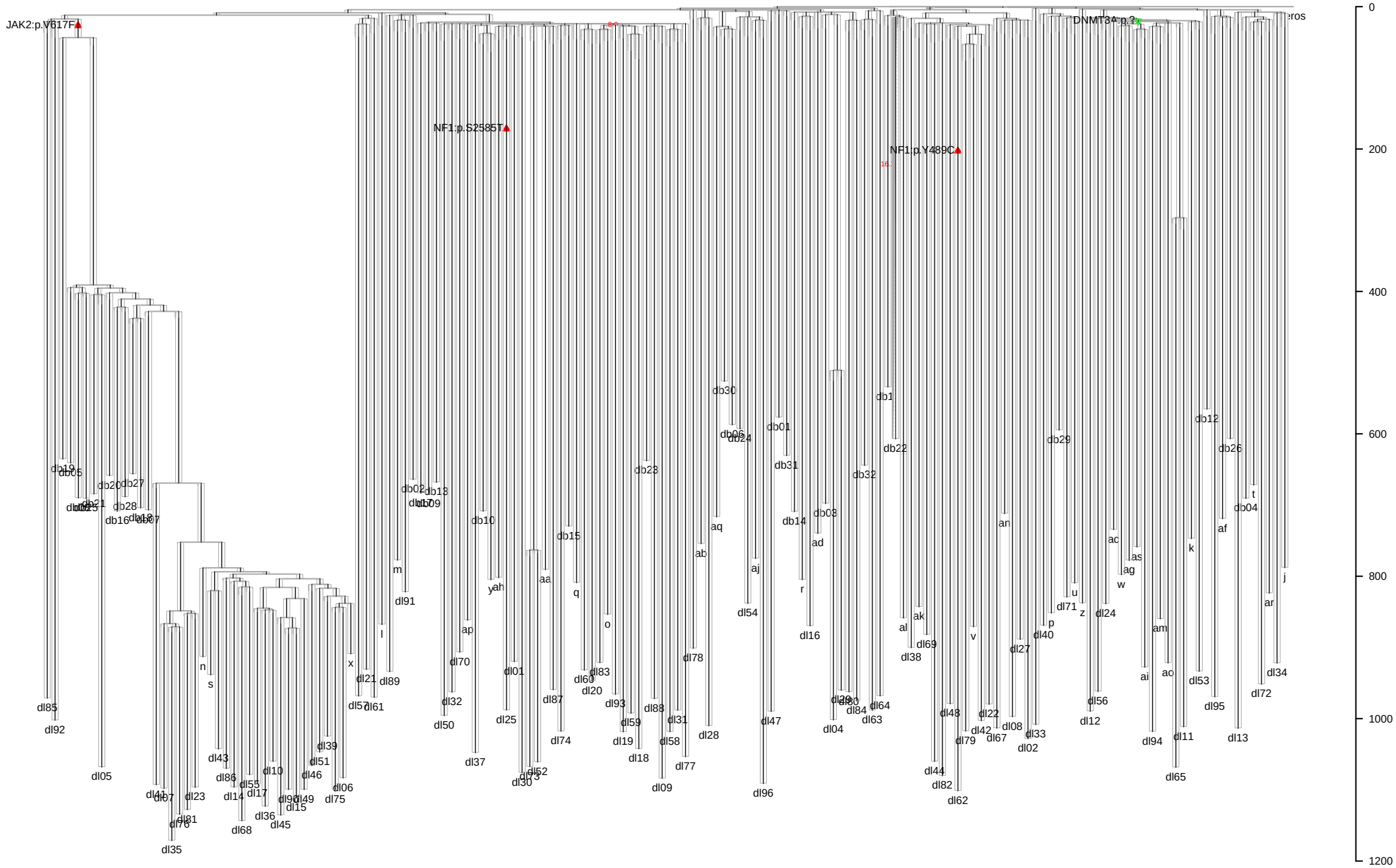
**PD5182: Annotated with VAF from dl64**
**Mean Depth=18.55**



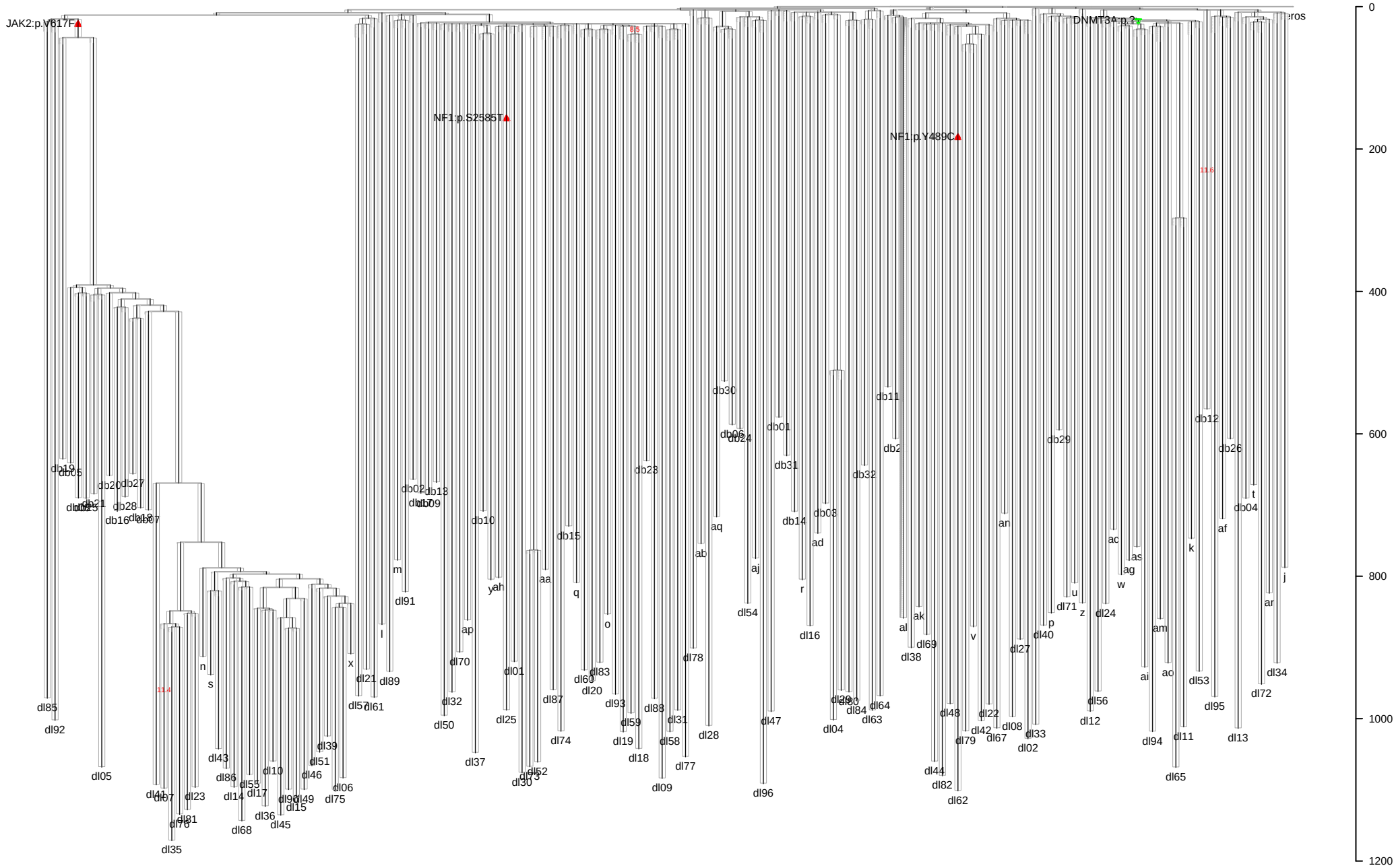
**PD5182: Annotated with VAF from db11**
**Mean Depth=18.98**



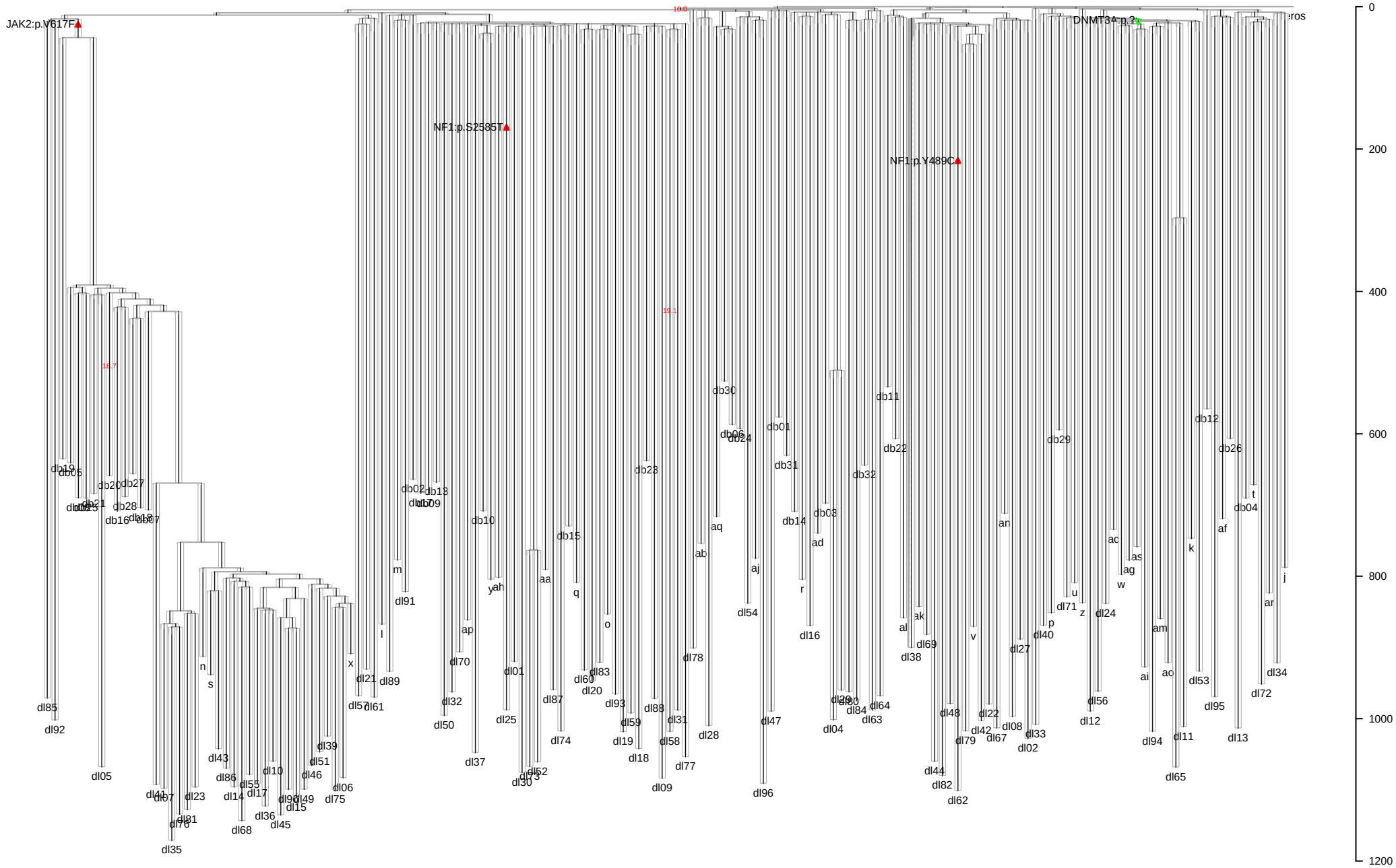
**PD5182: Annotated with VAF from db22**
**Mean Depth=16.70**



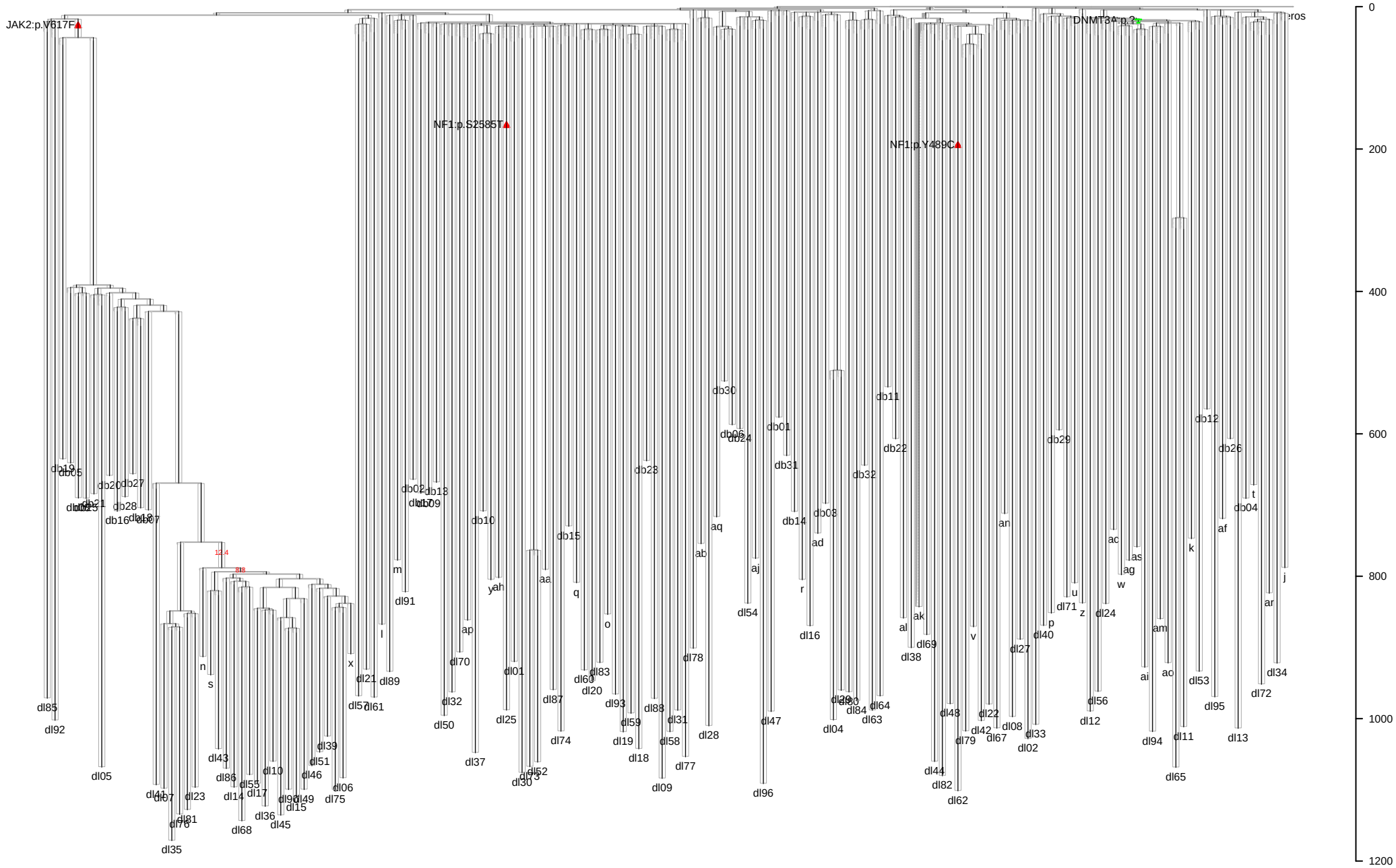
**PD5182: Annotated with VAF from al**
**Mean Depth=12.05**



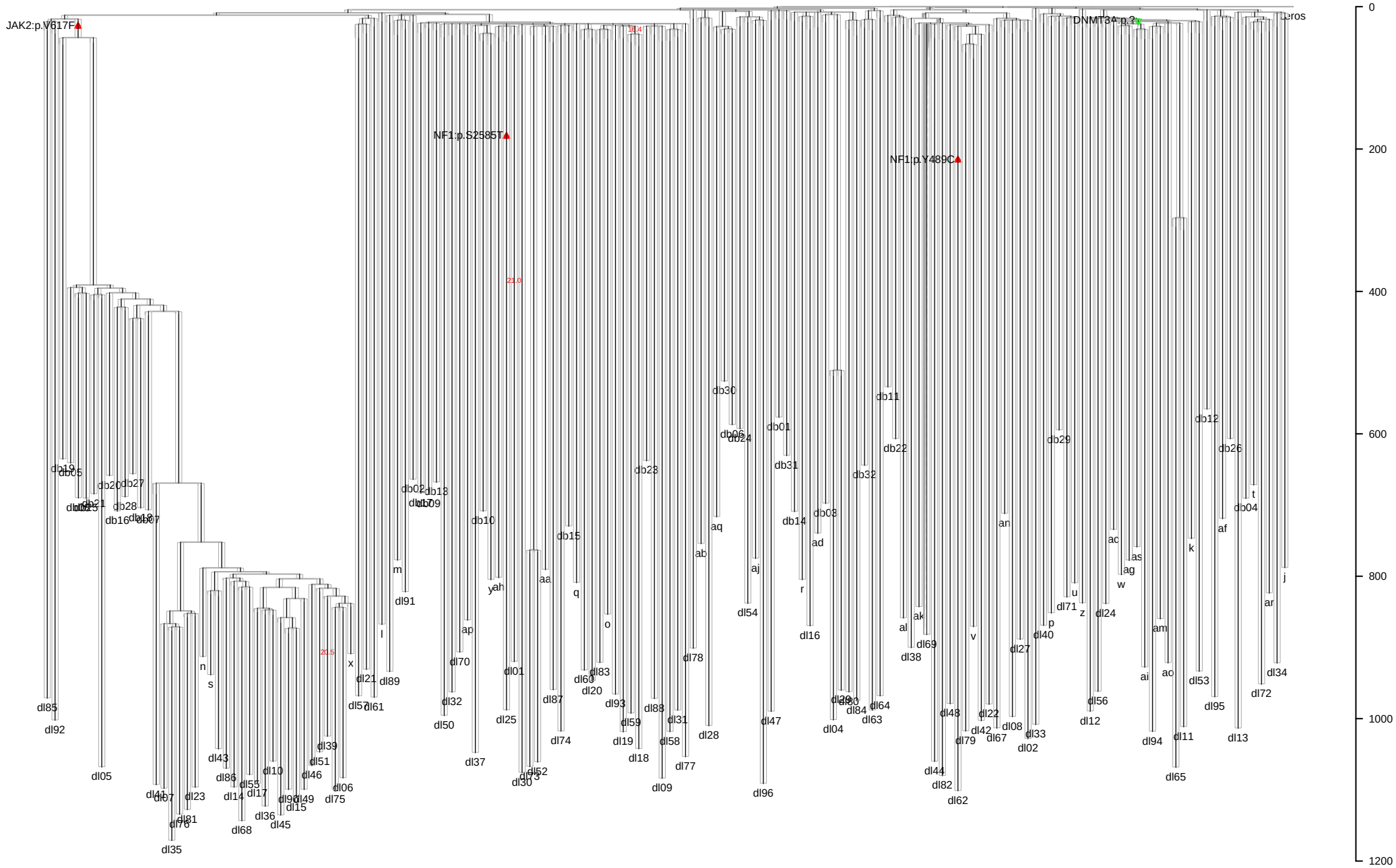
**PD5182: Annotated with VAF from dl38**
**Mean Depth=19.53**



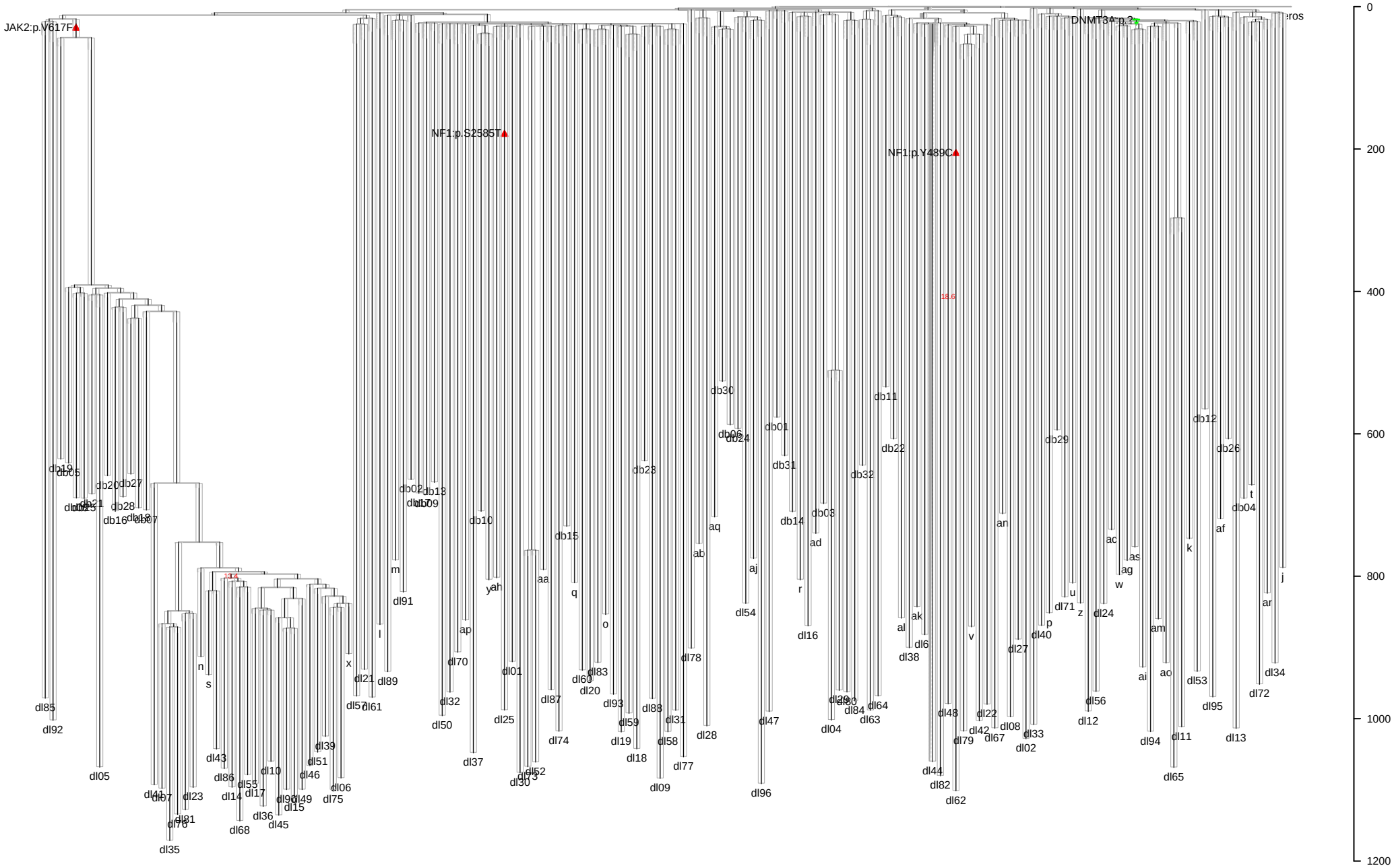
**PD5182: Annotated with VAF from ak**
**Mean Depth=14.17**



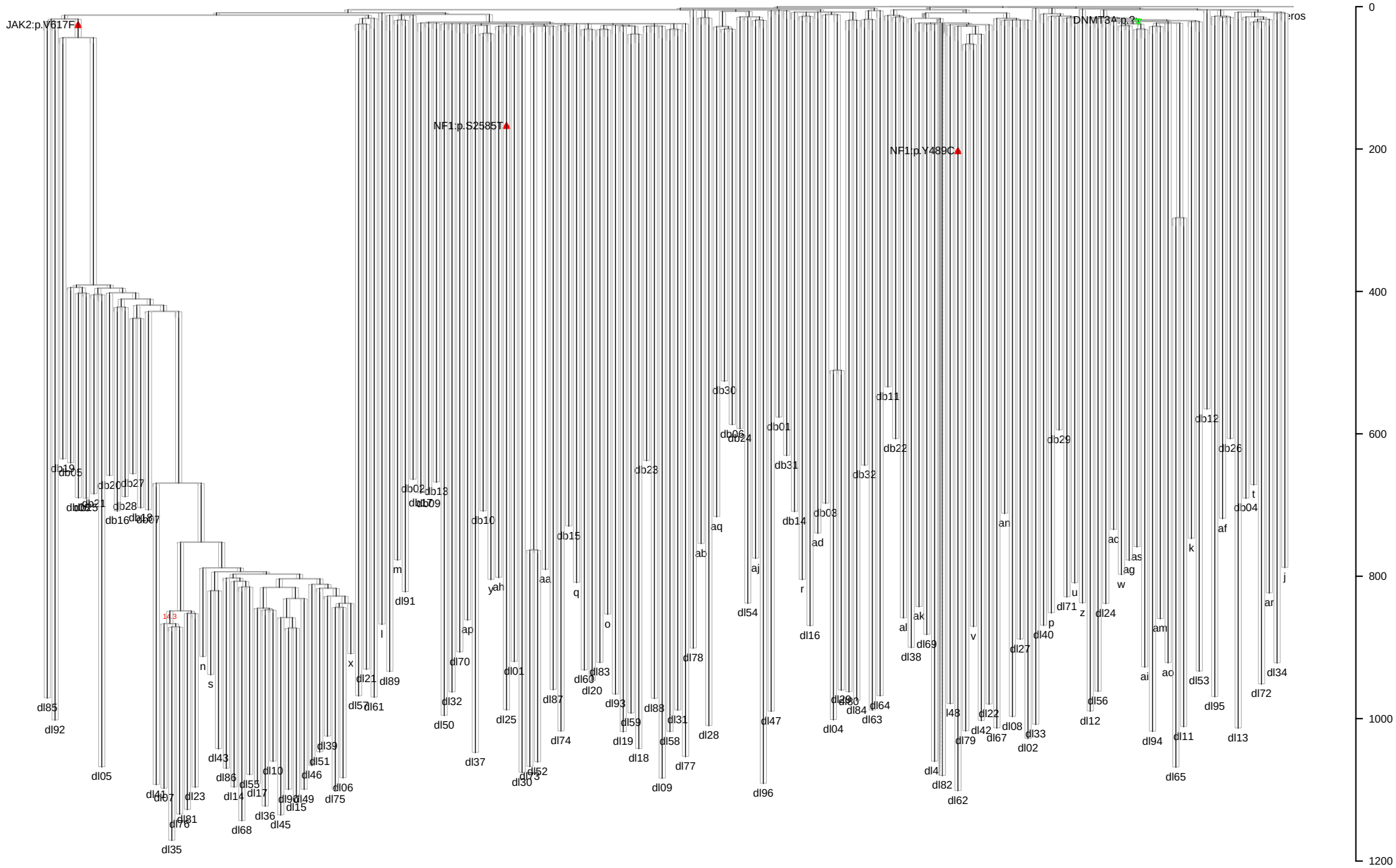
**PD5182: Annotated with VAF from dl69**
**Mean Depth=21.54**



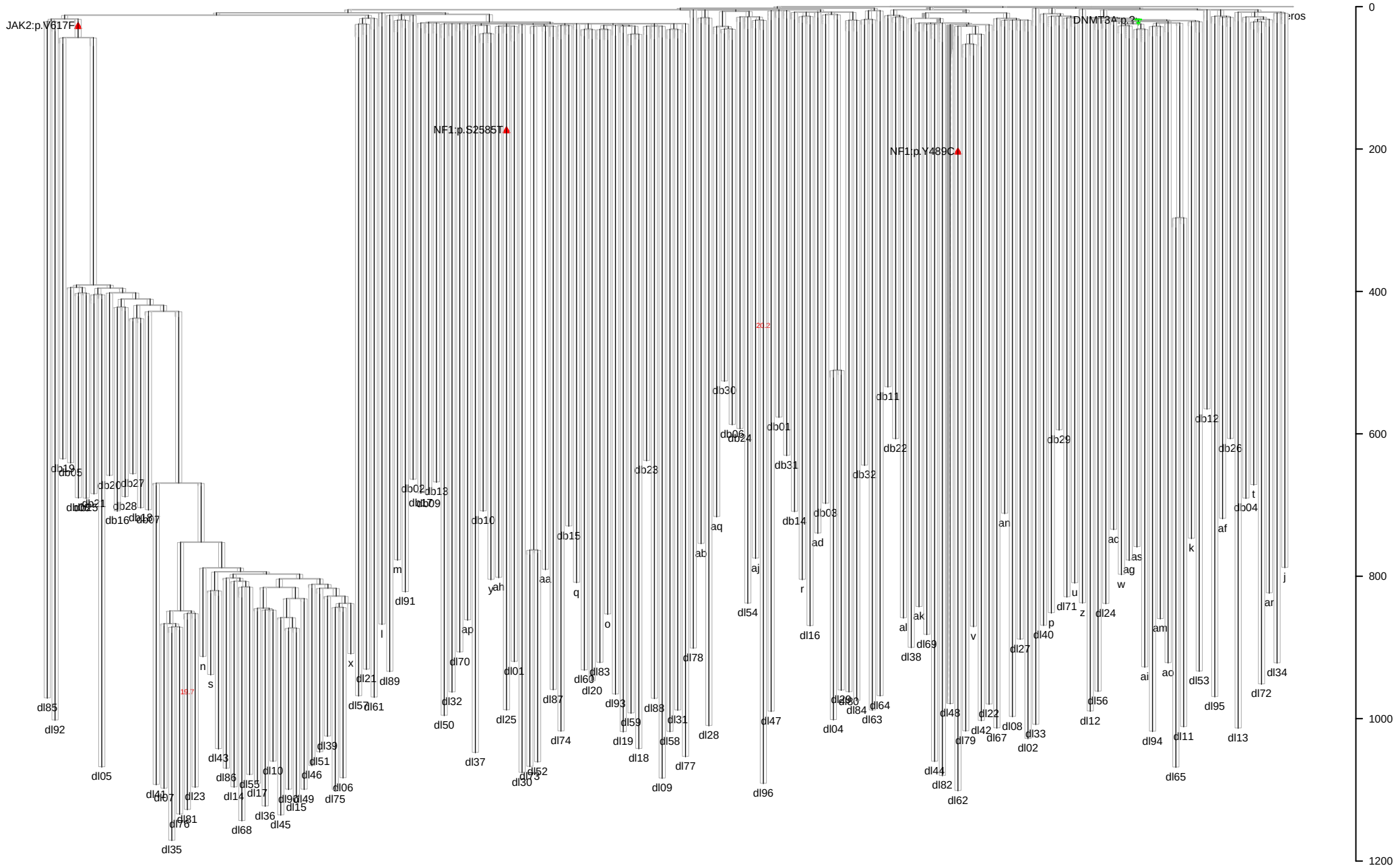
**PD5182: Annotated with VAF from dl44**
**Mean Depth=19.15**



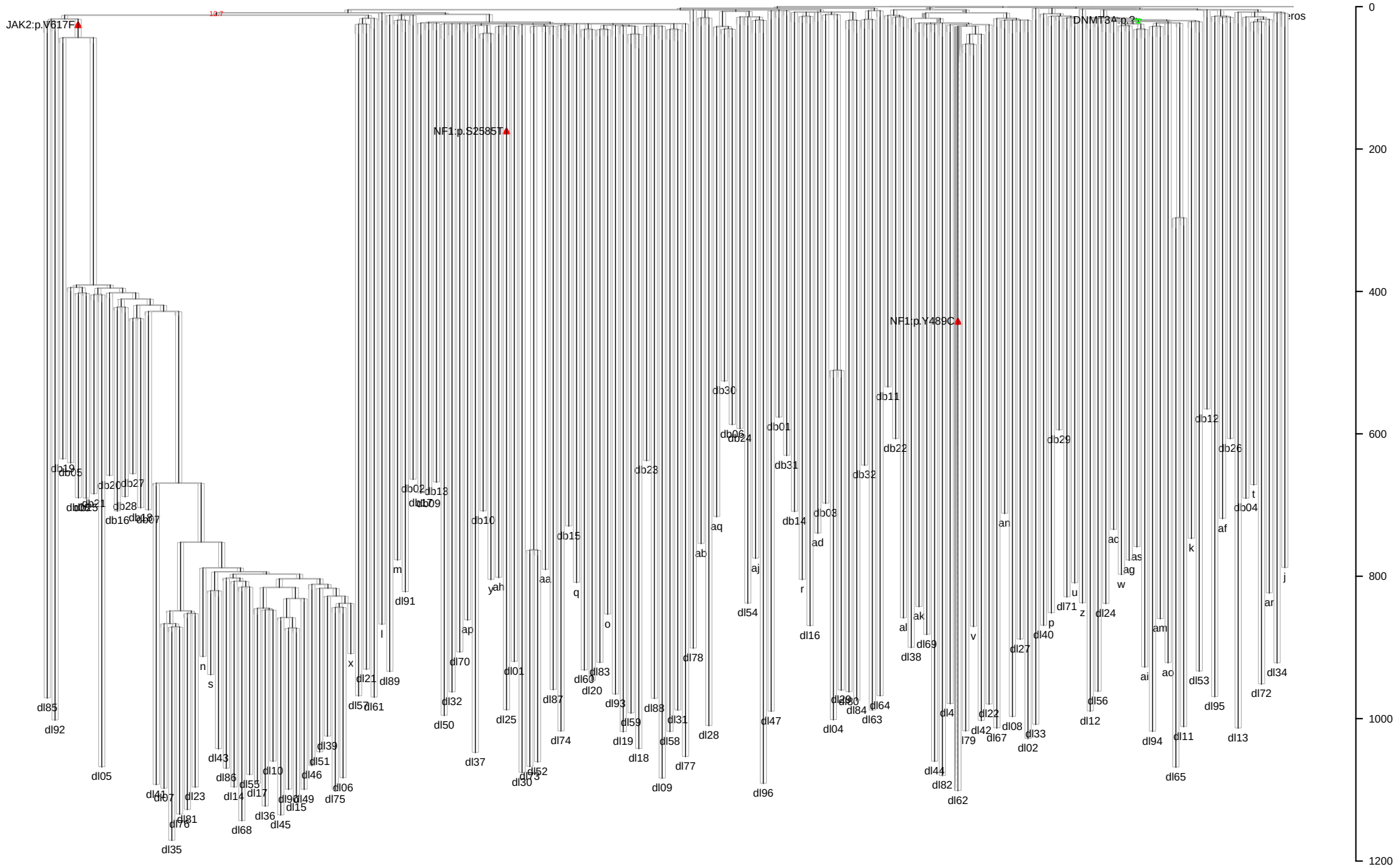
**PD5182: Annotated with VAF from dl82**
**Mean Depth=17.29**



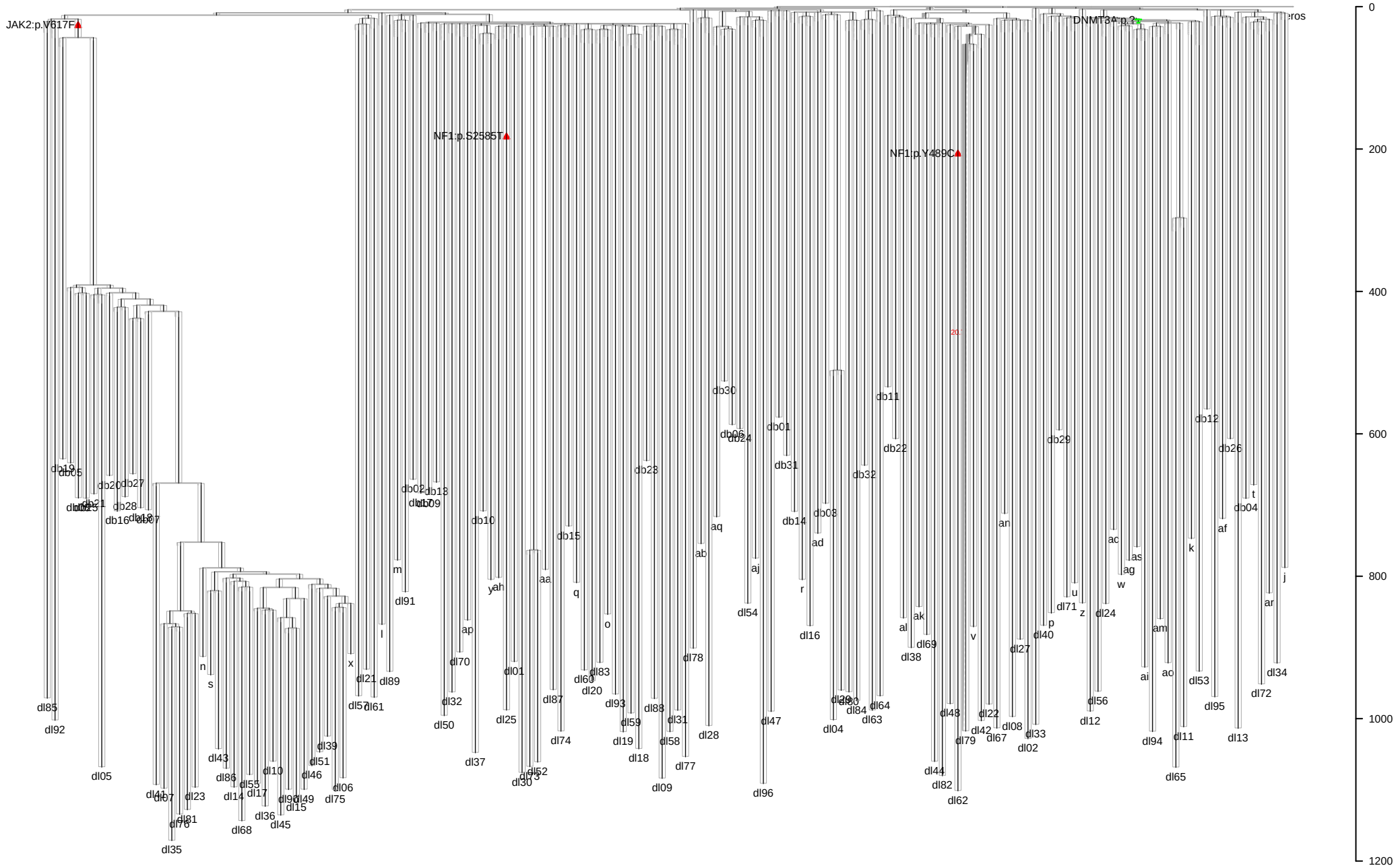
**PD5182: Annotated with VAF from dl48**
**Mean Depth=20.64**



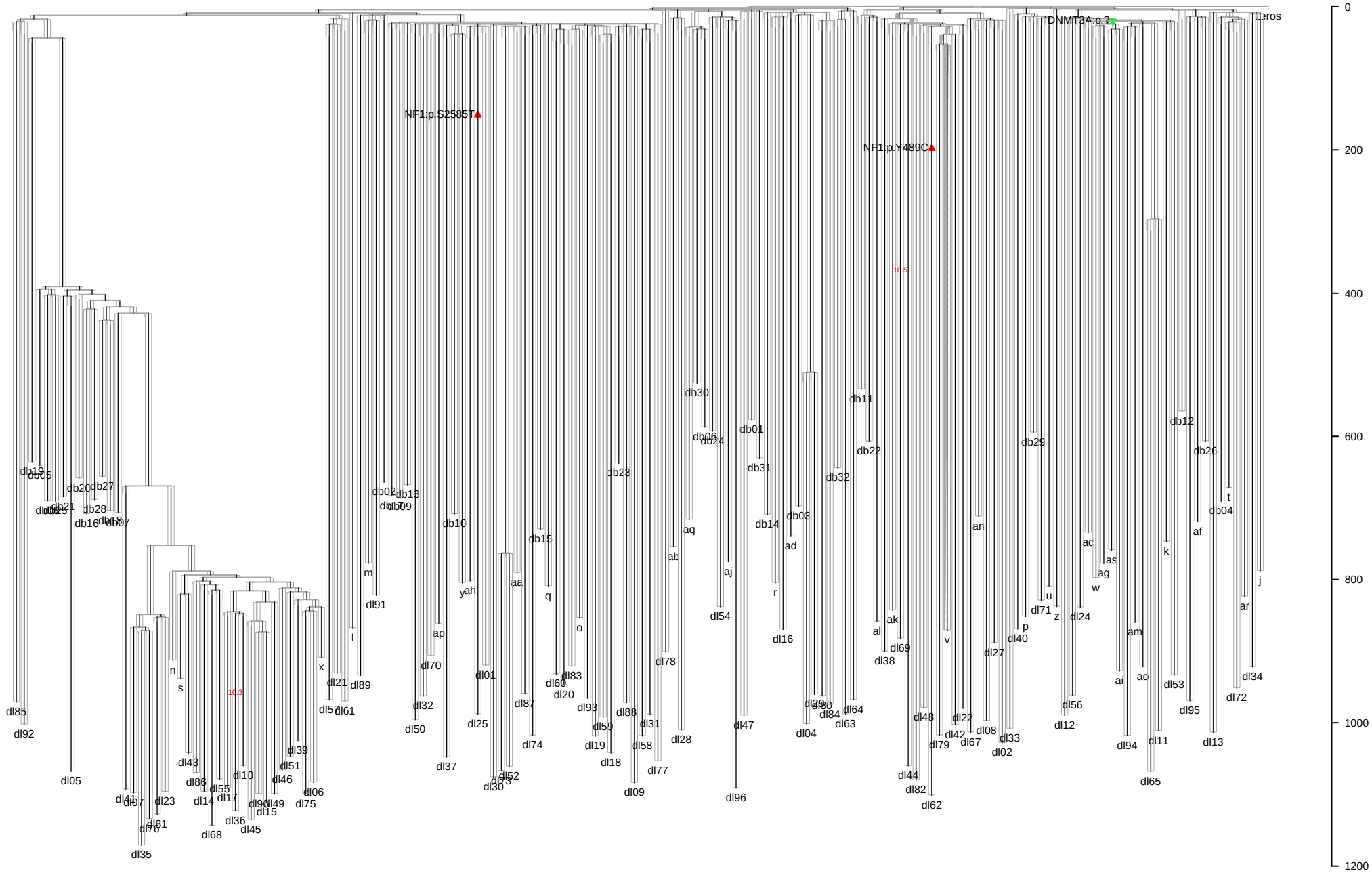
**PD5182: Annotated with VAF from dl62**
**Mean Depth=20.13**



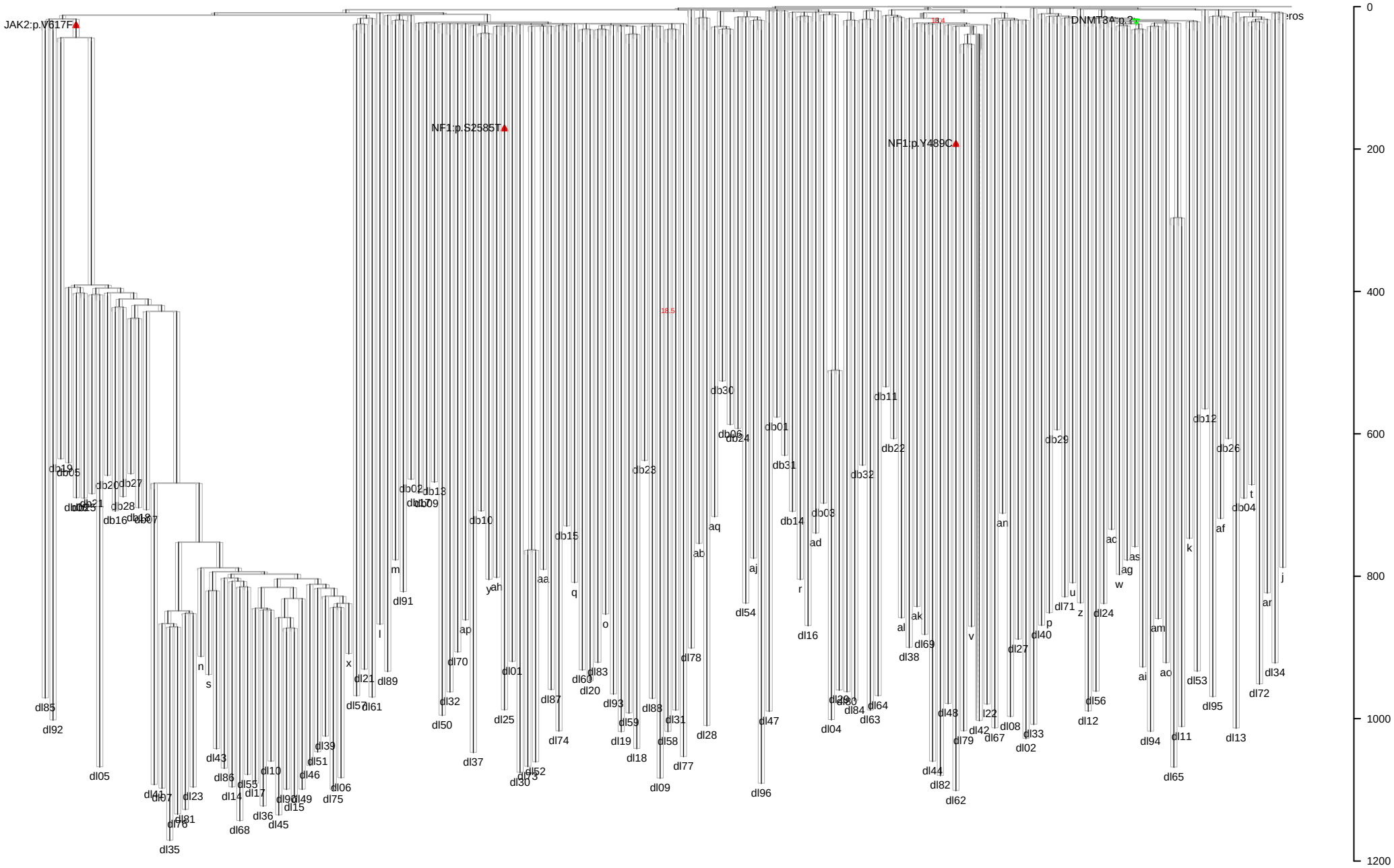
**PD5182: Annotated with VAF from dl79**
**Mean Depth=21.22**



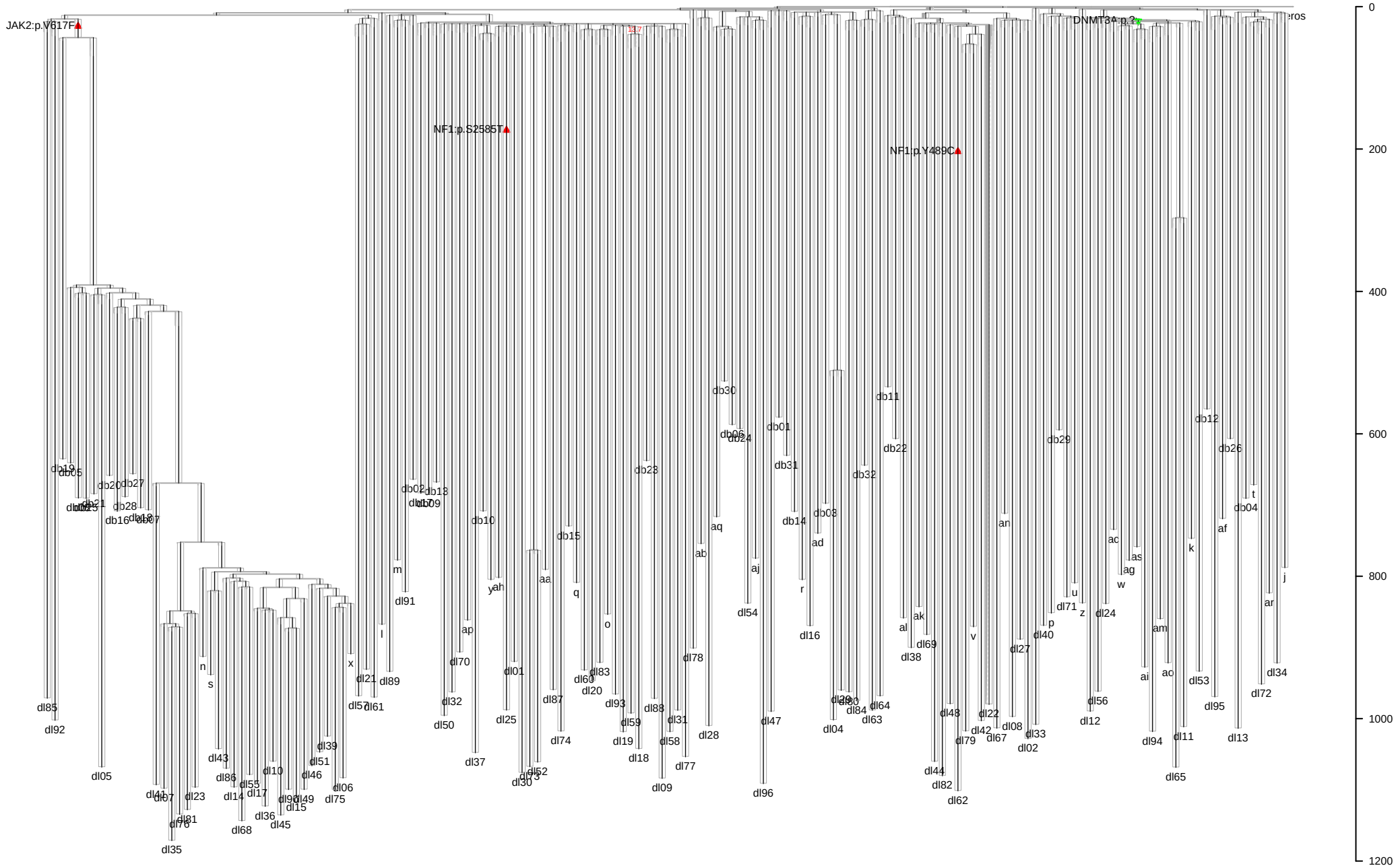
**PD5182: Annotated with VAF from v**
**Mean Depth=10.85**



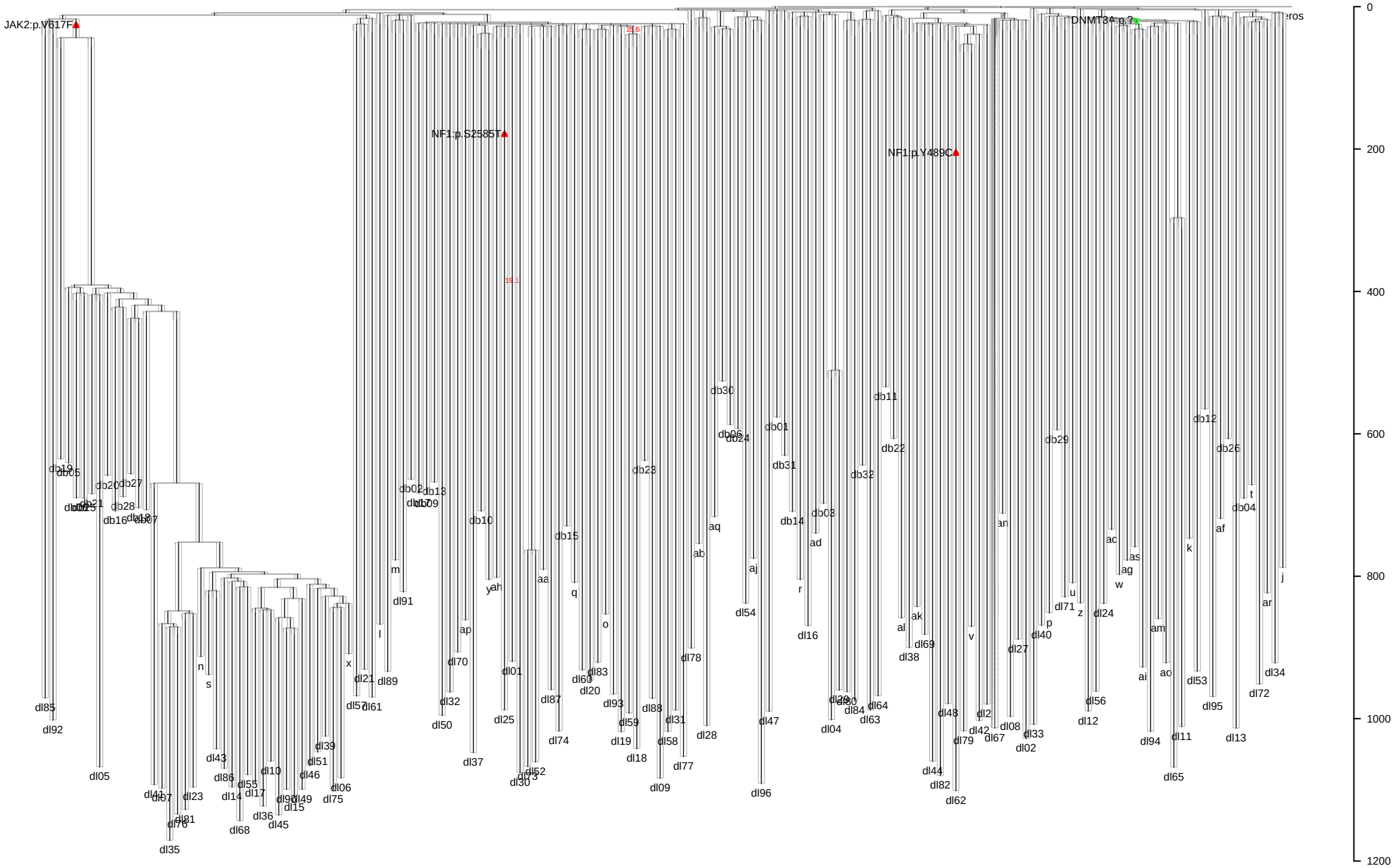
**PD5182: Annotated with VAF from dl42**
**Mean Depth=19.02**



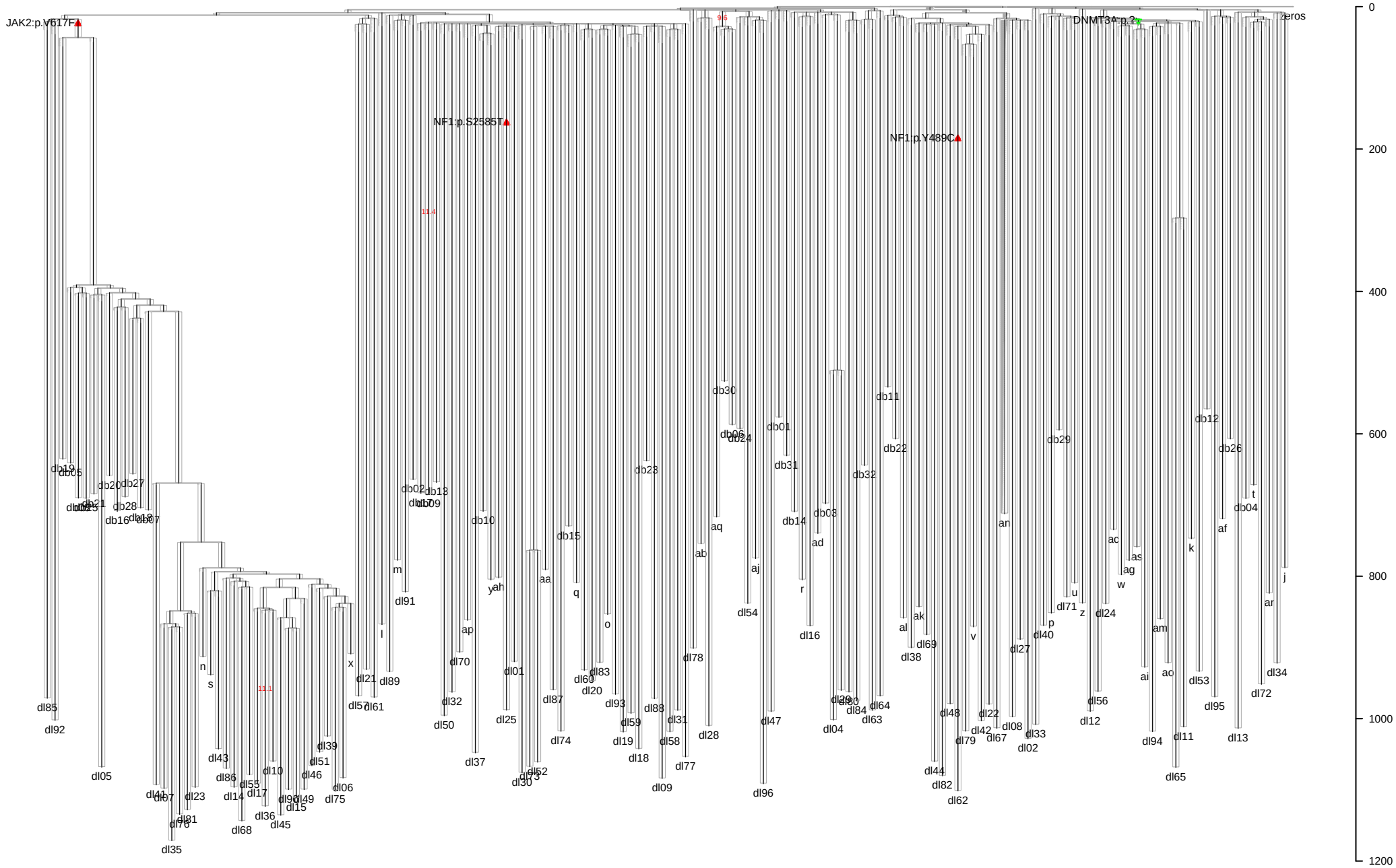
**PD5182: Annotated with VAF from dl22**
**Mean Depth=18.34**



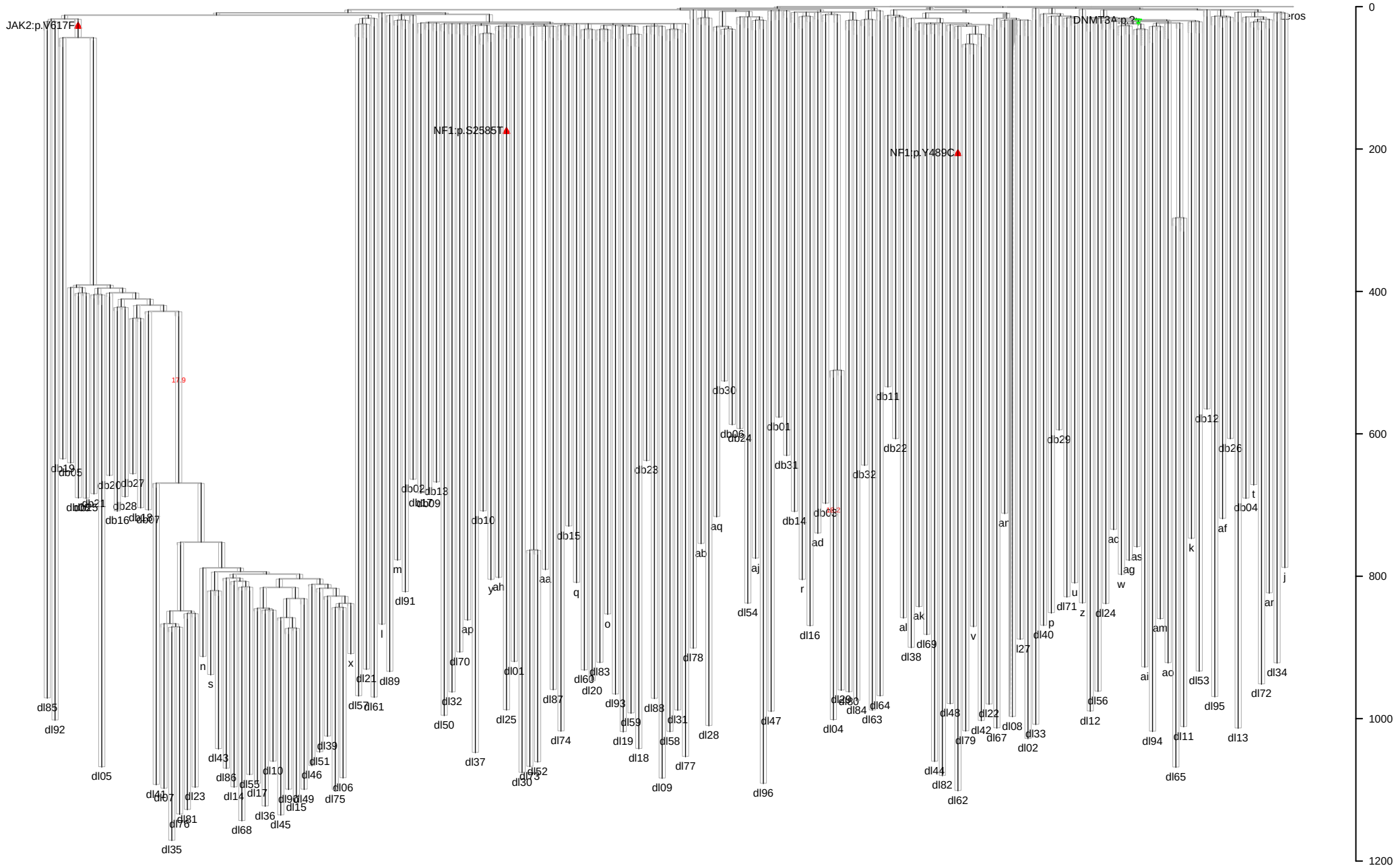
**PD5182: Annotated with VAF from dl67**
**Mean Depth=19.62**



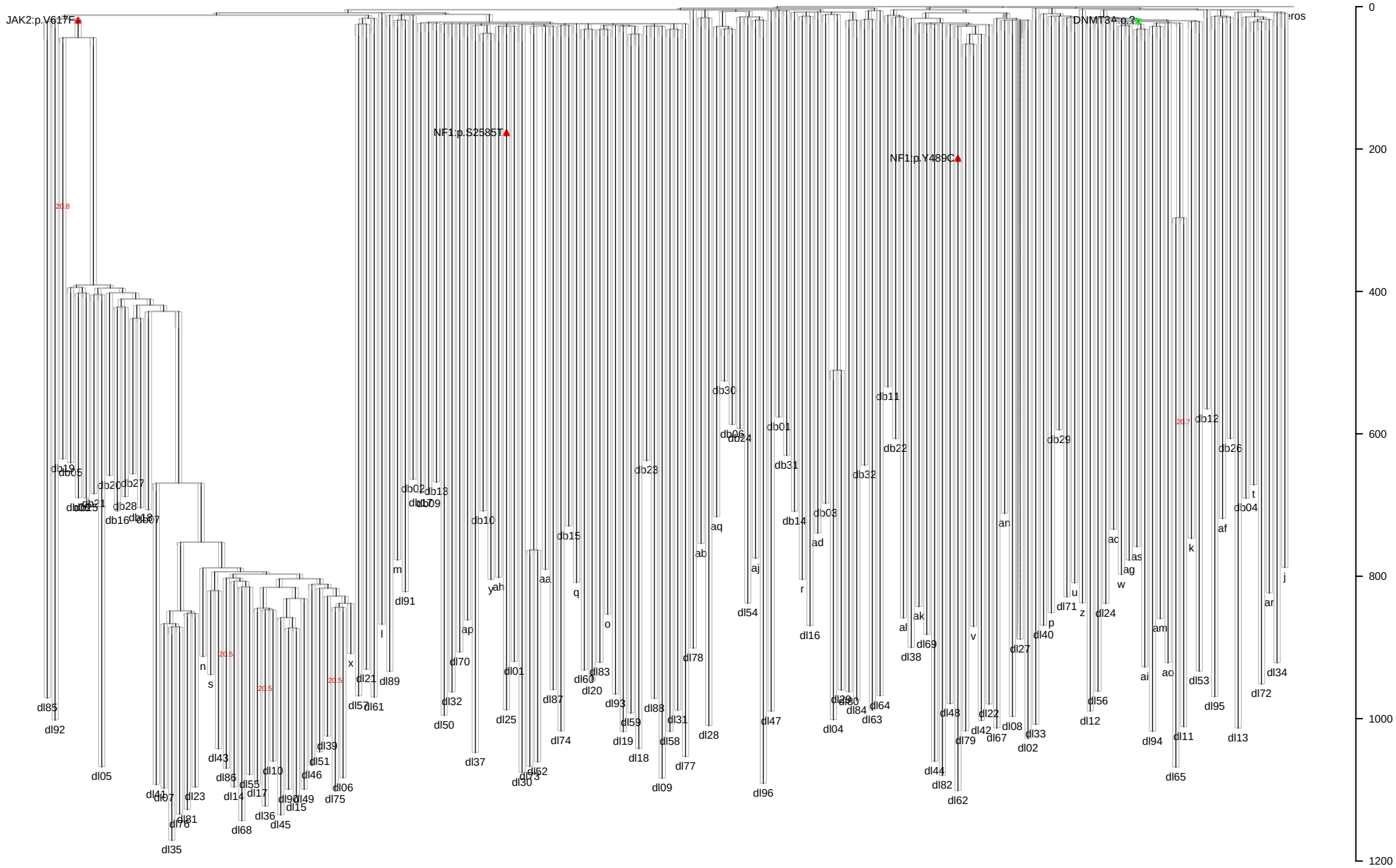
**PD5182: Annotated with VAF from an Mean Depth=11.77**



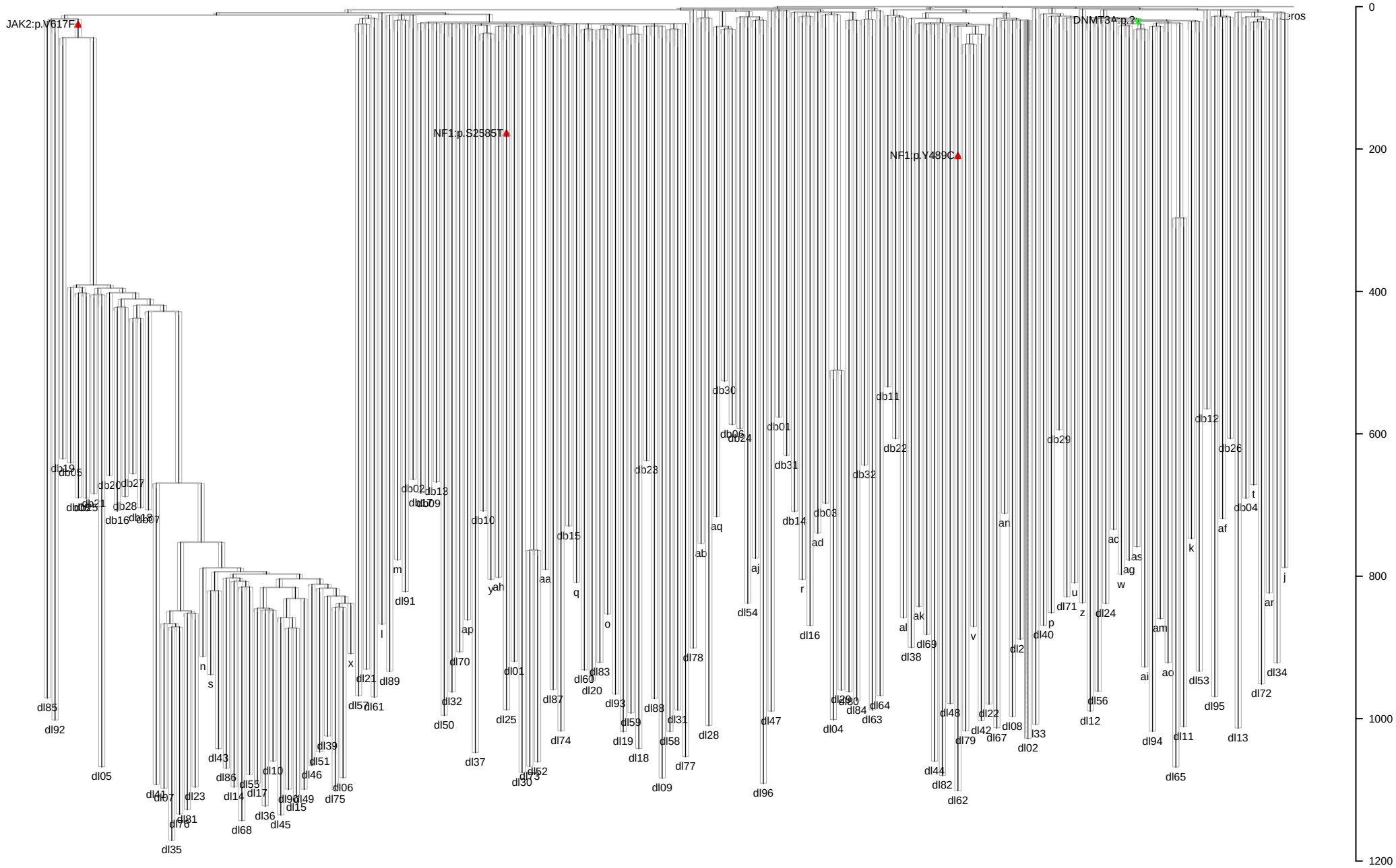
**PD5182: Annotated with VAF from dl08**
**Mean Depth=18.87**



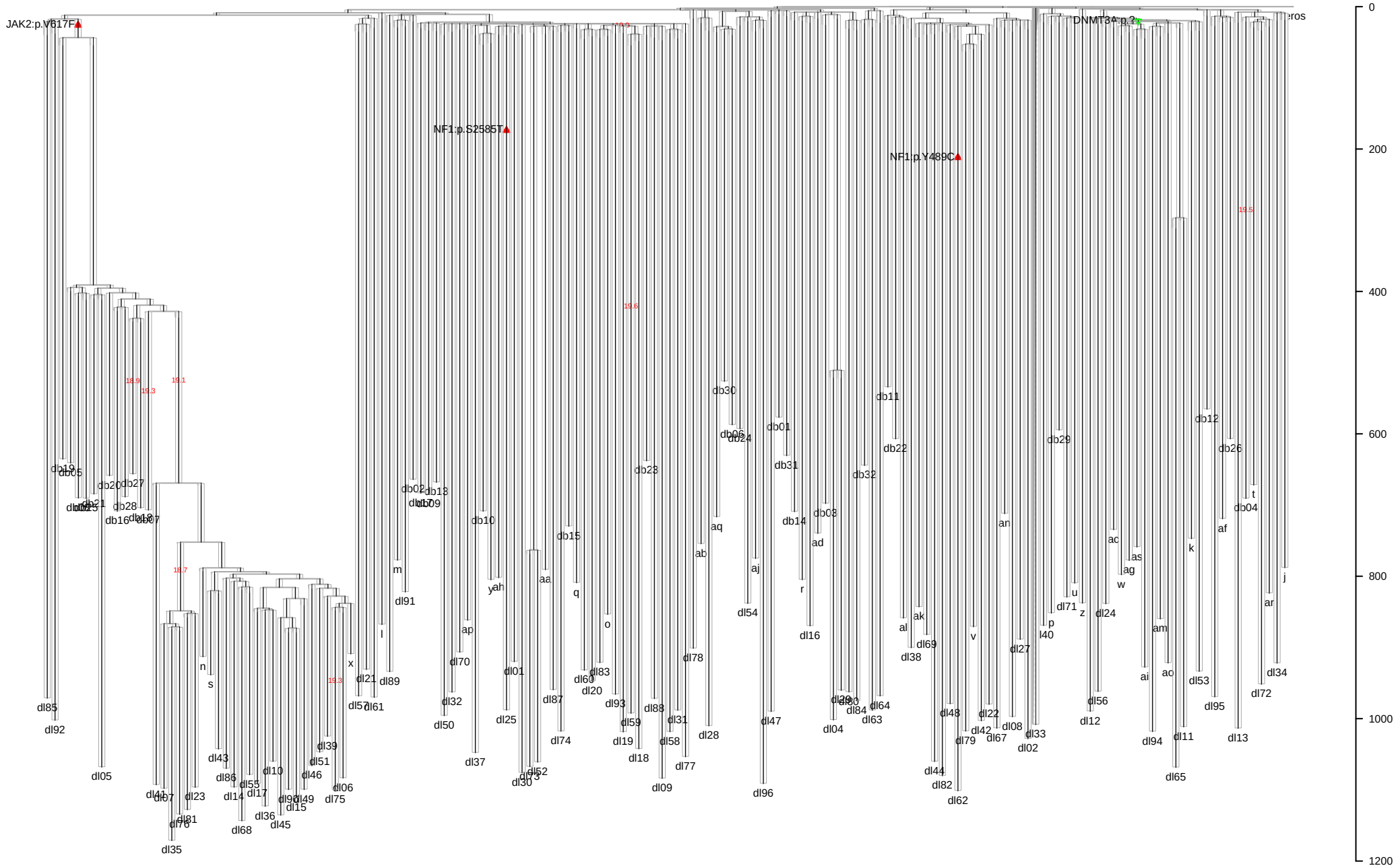
**PD5182: Annotated with VAF from dl27**
**Mean Depth=21.39**



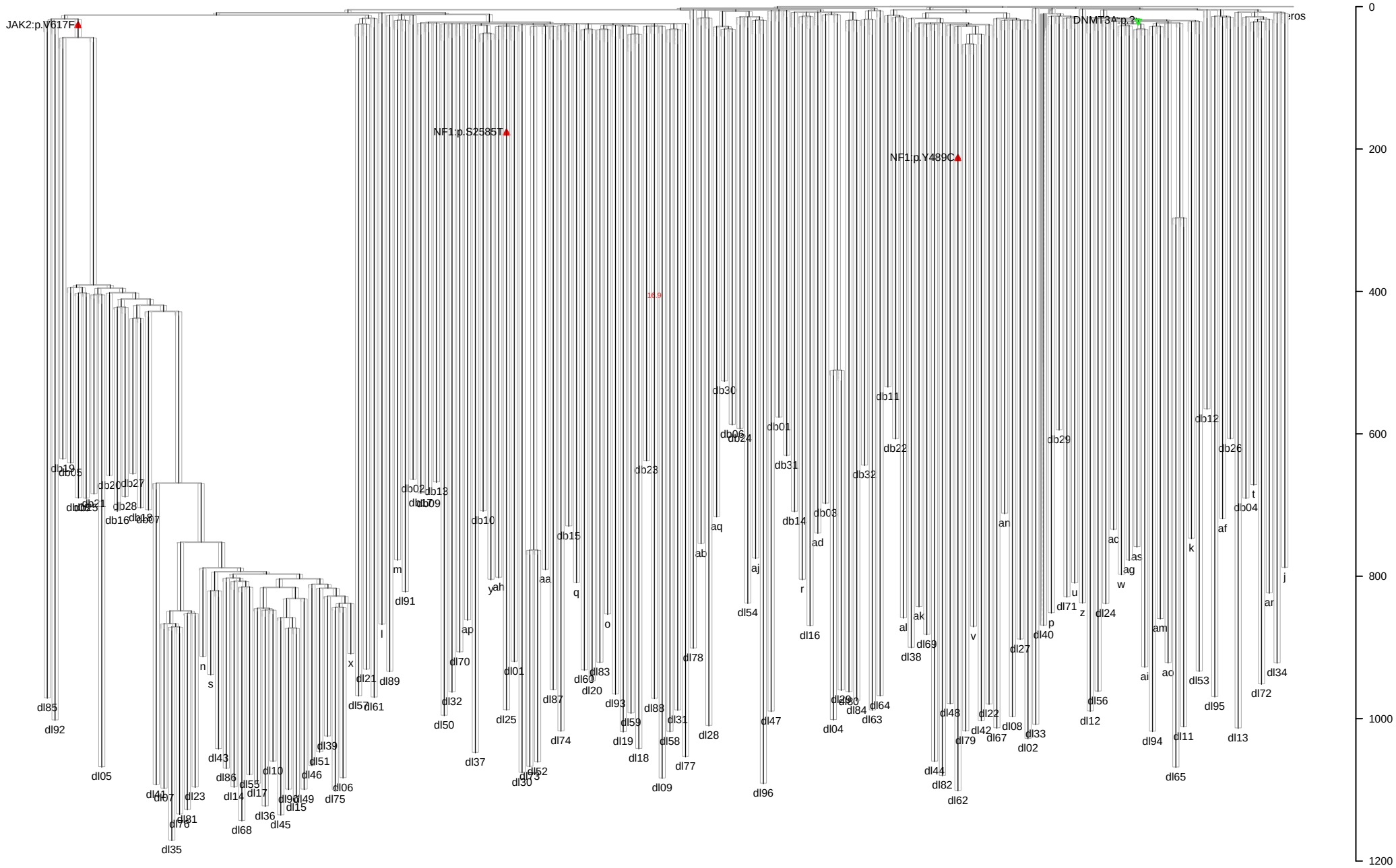
**PD5182: Annotated with VAF from dl02**
**Mean Depth=19.26**



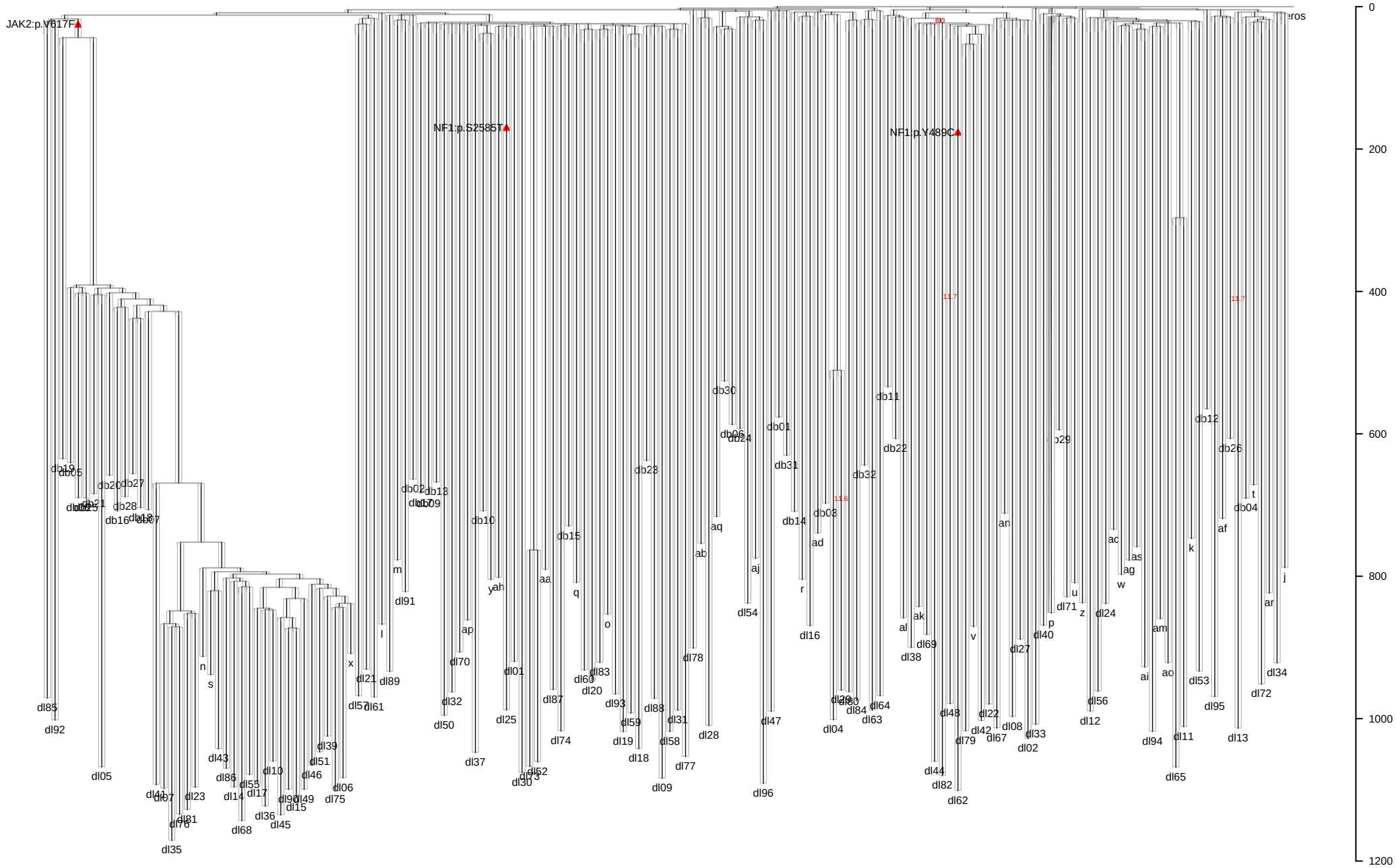
**PD5182: Annotated with VAF from dl33**
**Mean Depth=20.15**



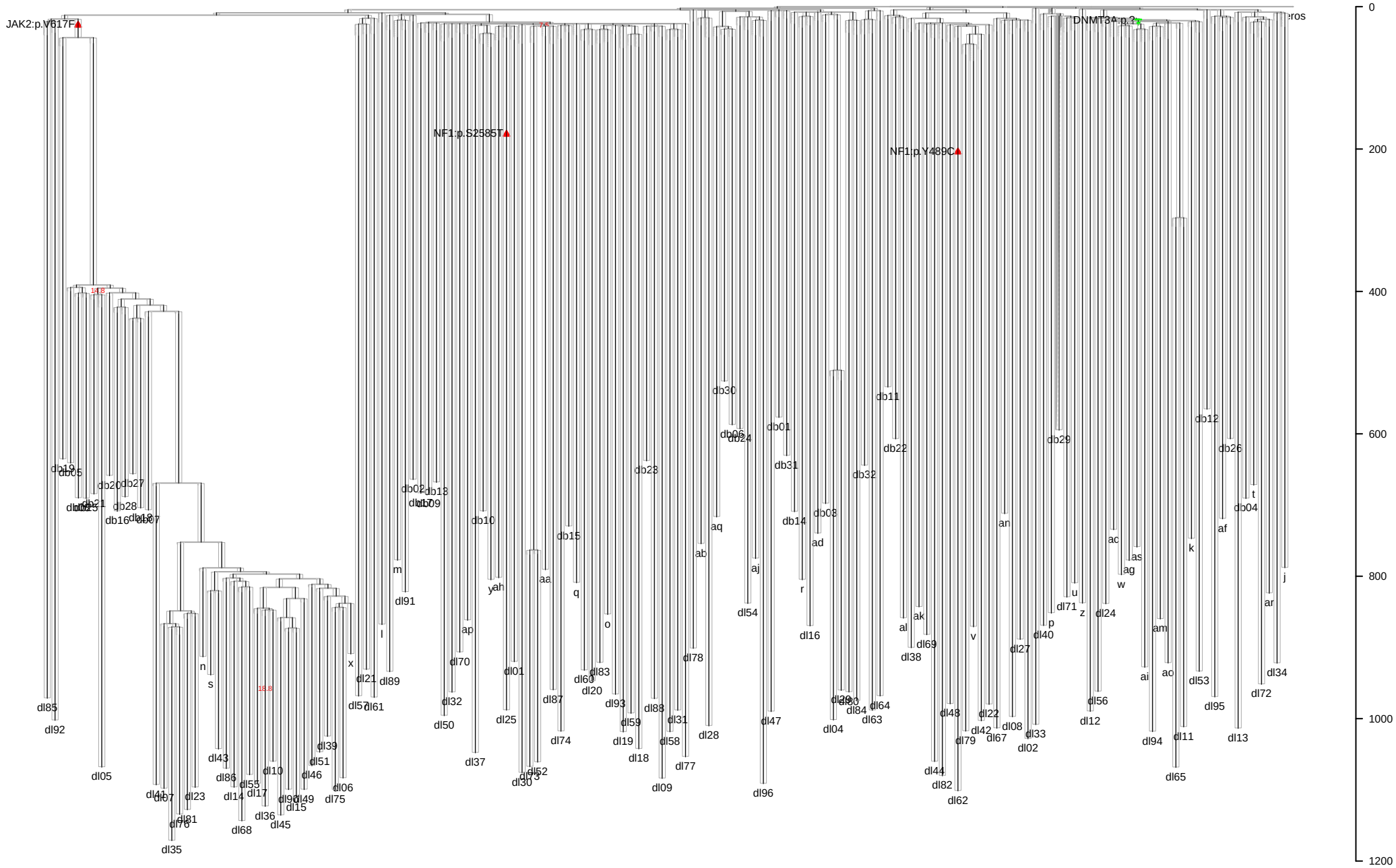
**PD5182: Annotated with VAF from dl40**
**Mean Depth=17.41**



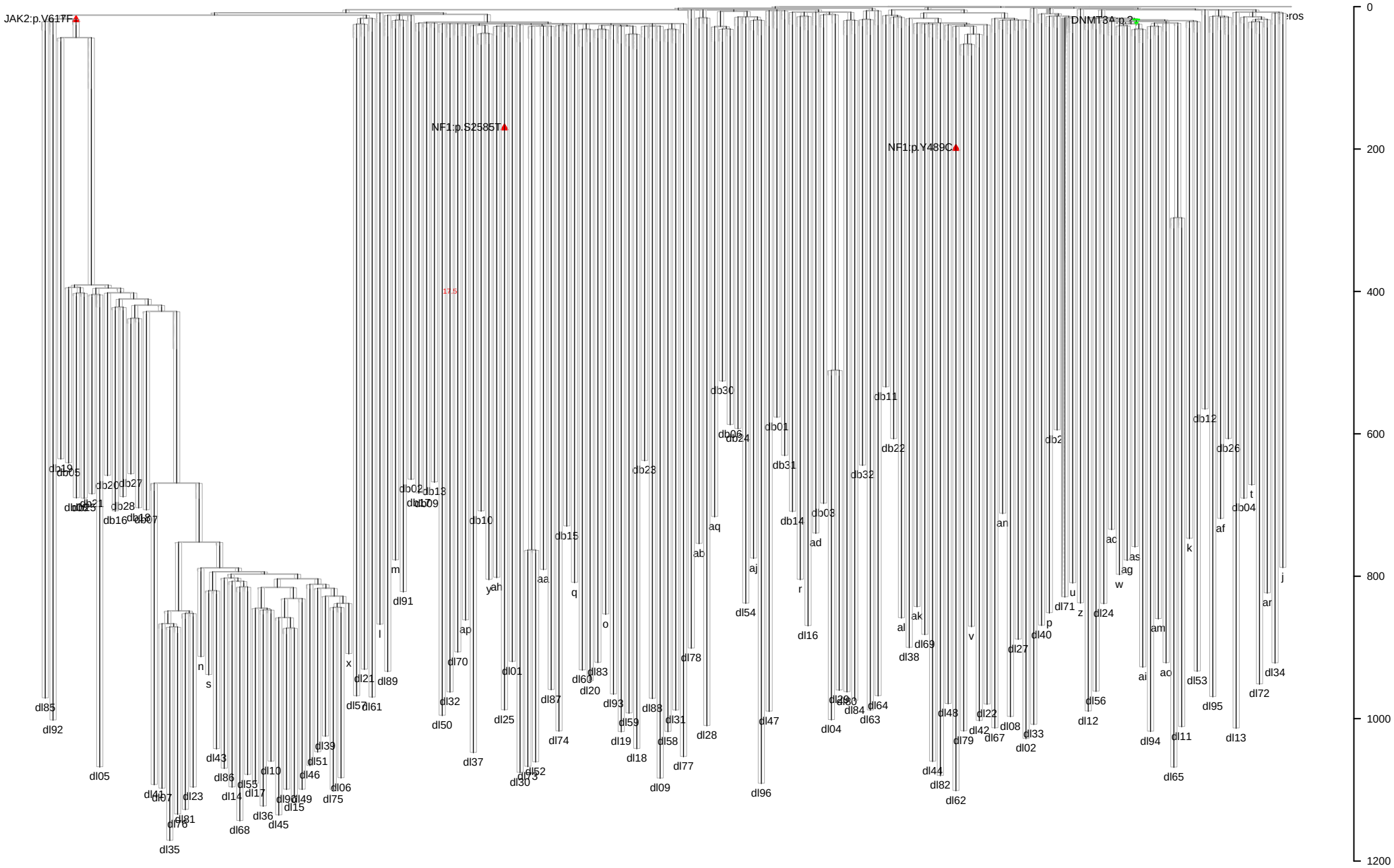
**PD5182: Annotated with VAF from p**
**Mean Depth=12.09**



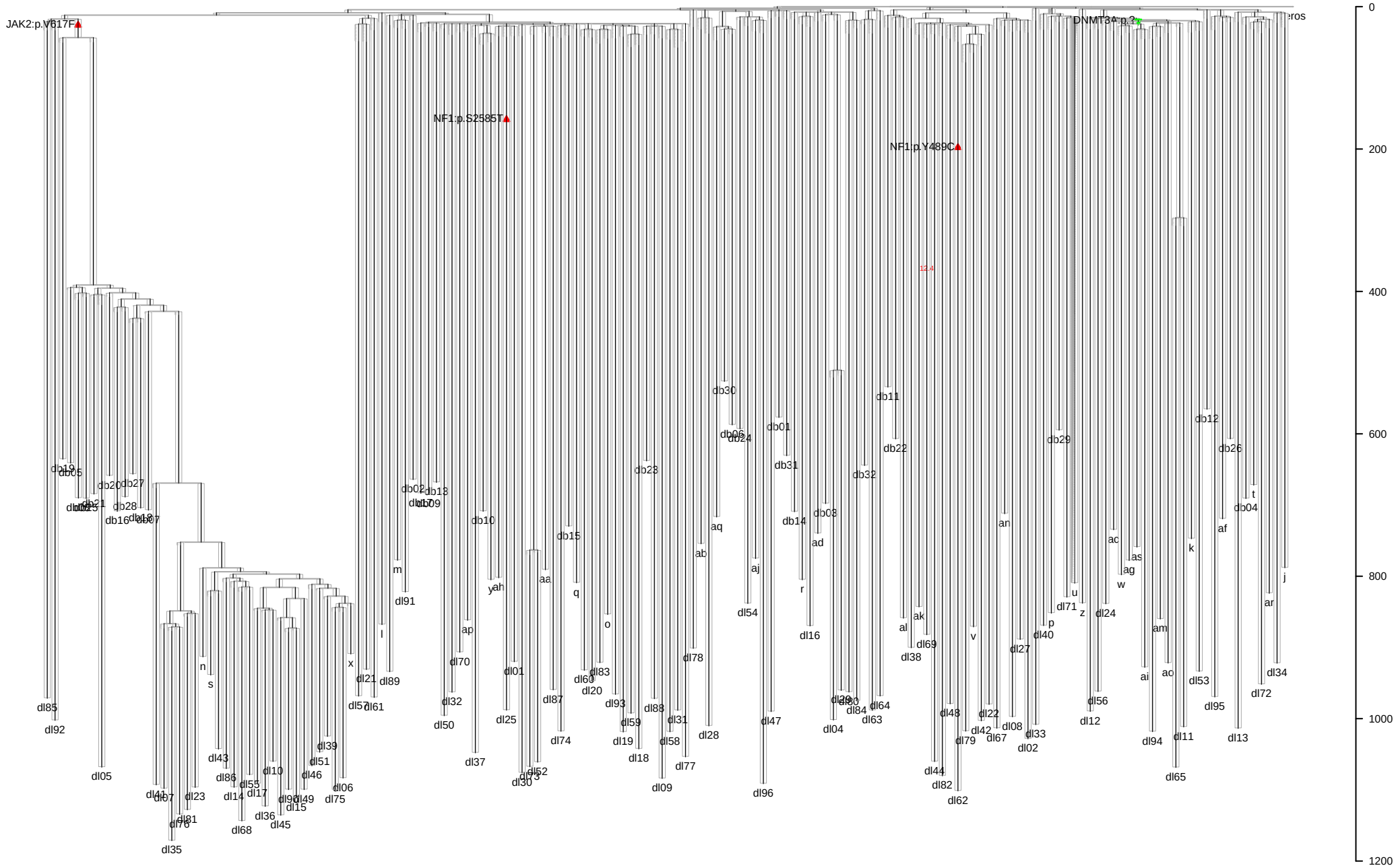
**PD5182: Annotated with VAF from db29**
**Mean Depth=20.07**



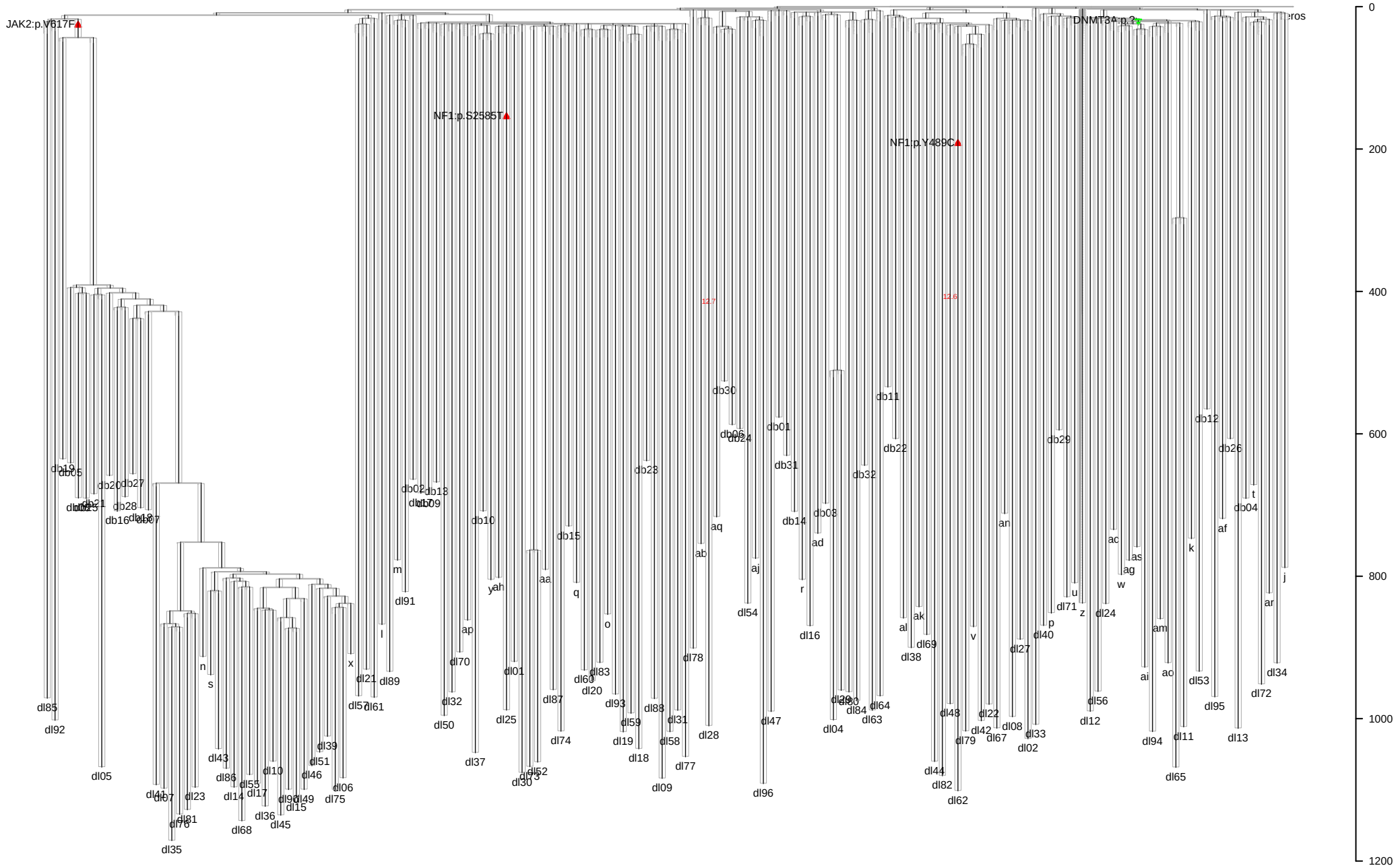
**PD5182: Annotated with VAF from dl71**
**Mean Depth=17.95**



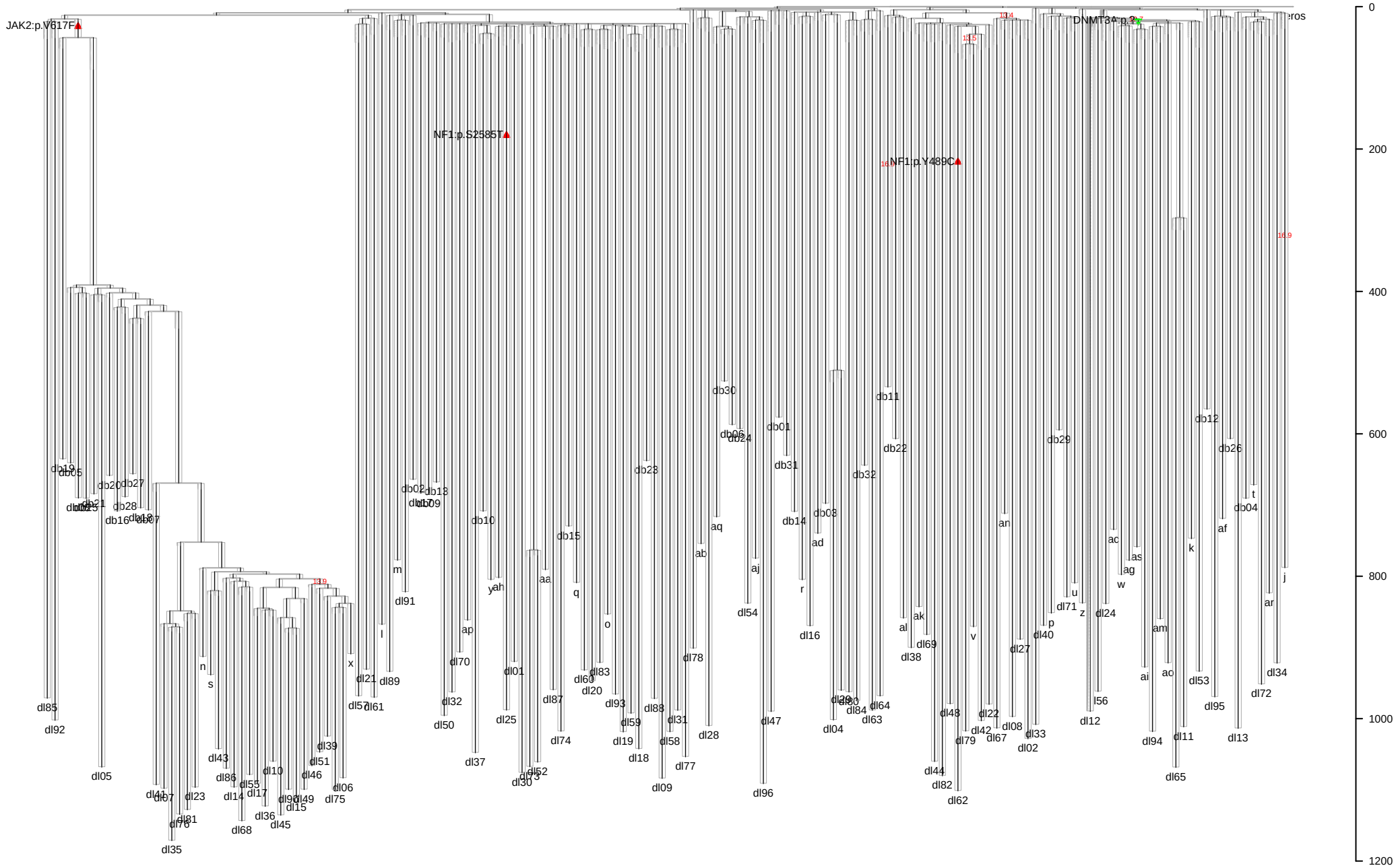
**PD5182: Annotated with VAF from u**
**Mean Depth=12.80**



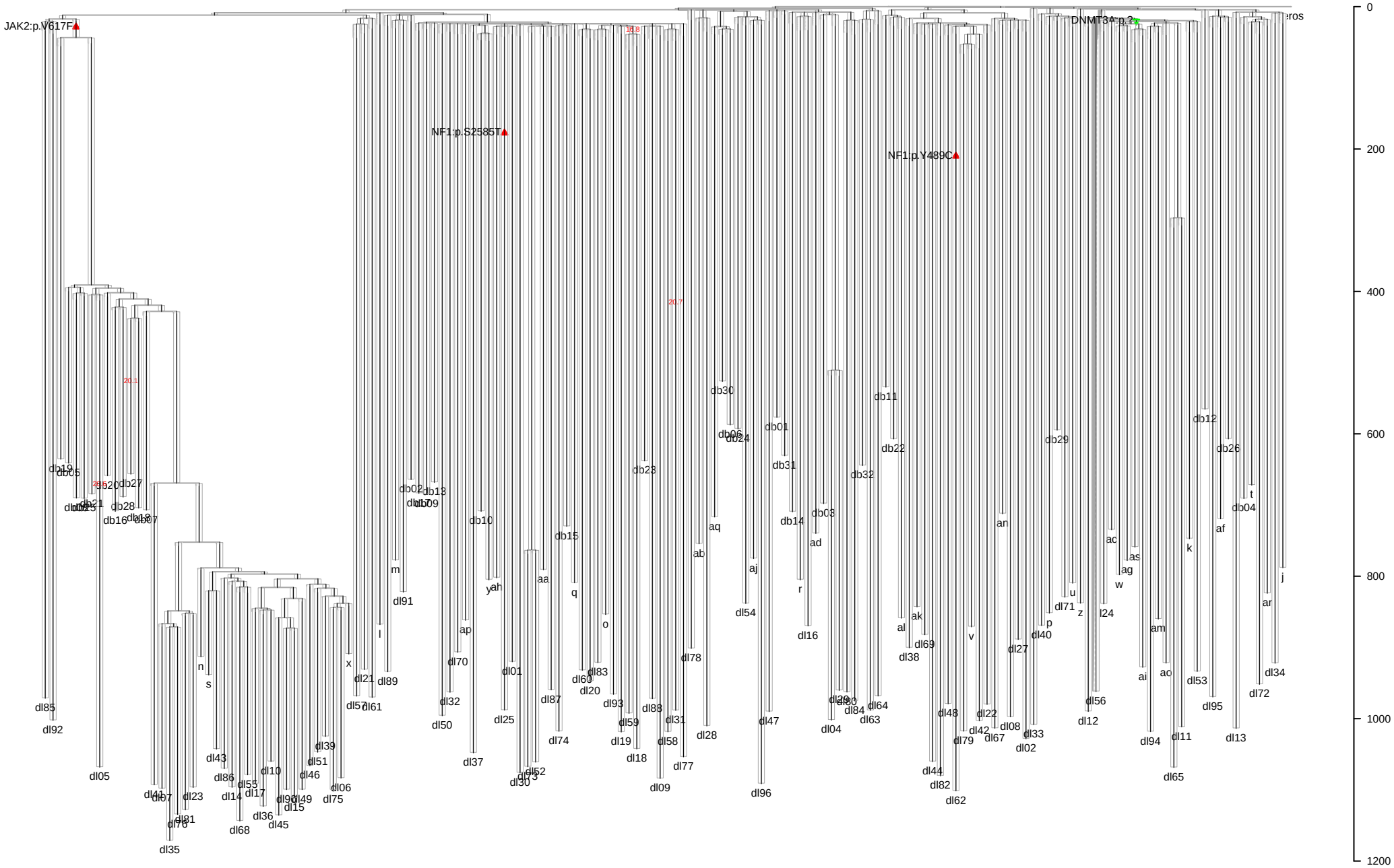
**PD5182: Annotated with VAF from z**
**Mean Depth=13.04**



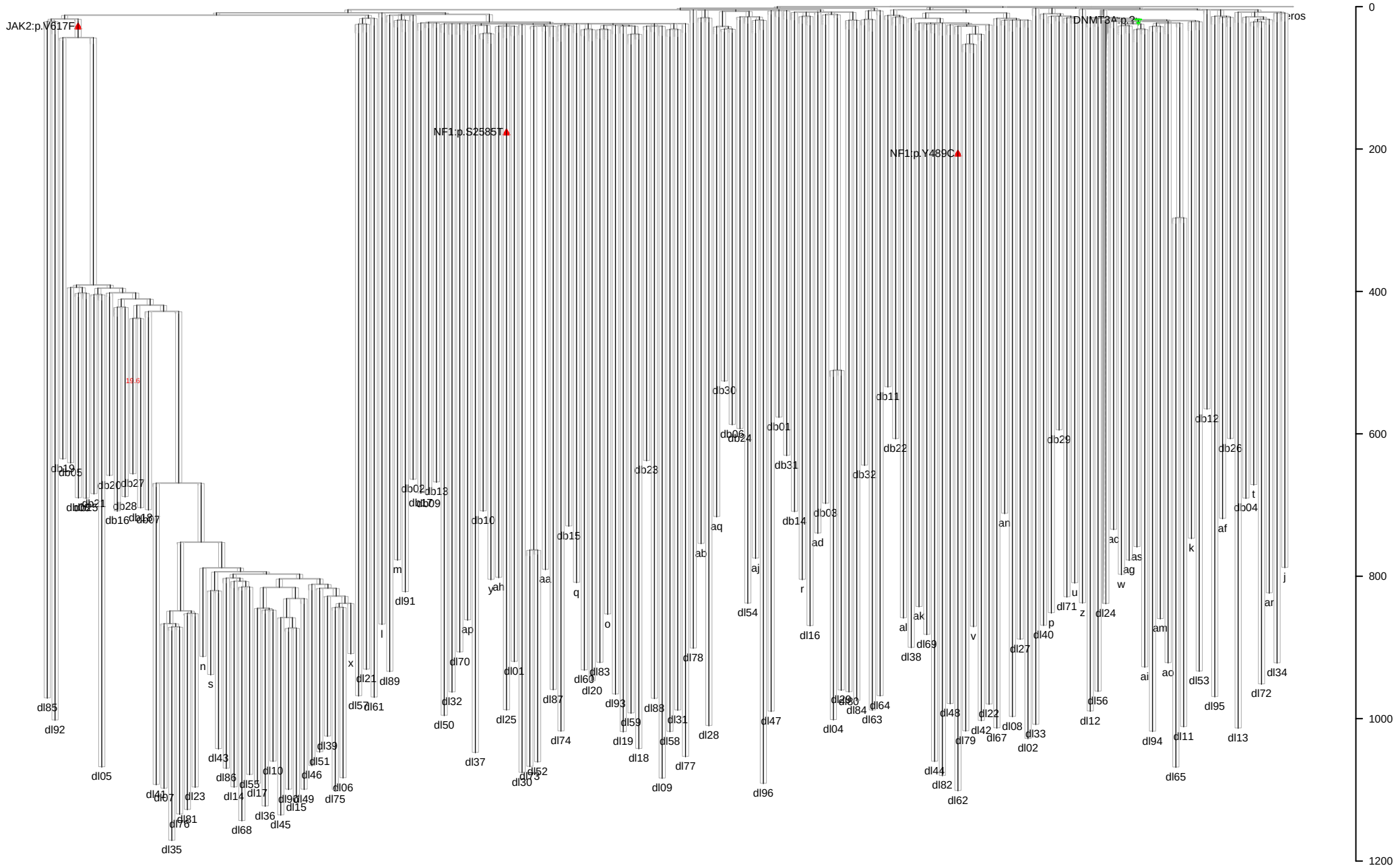
**PD5182: Annotated with VAF from dl12**
**Mean Depth=17.42**



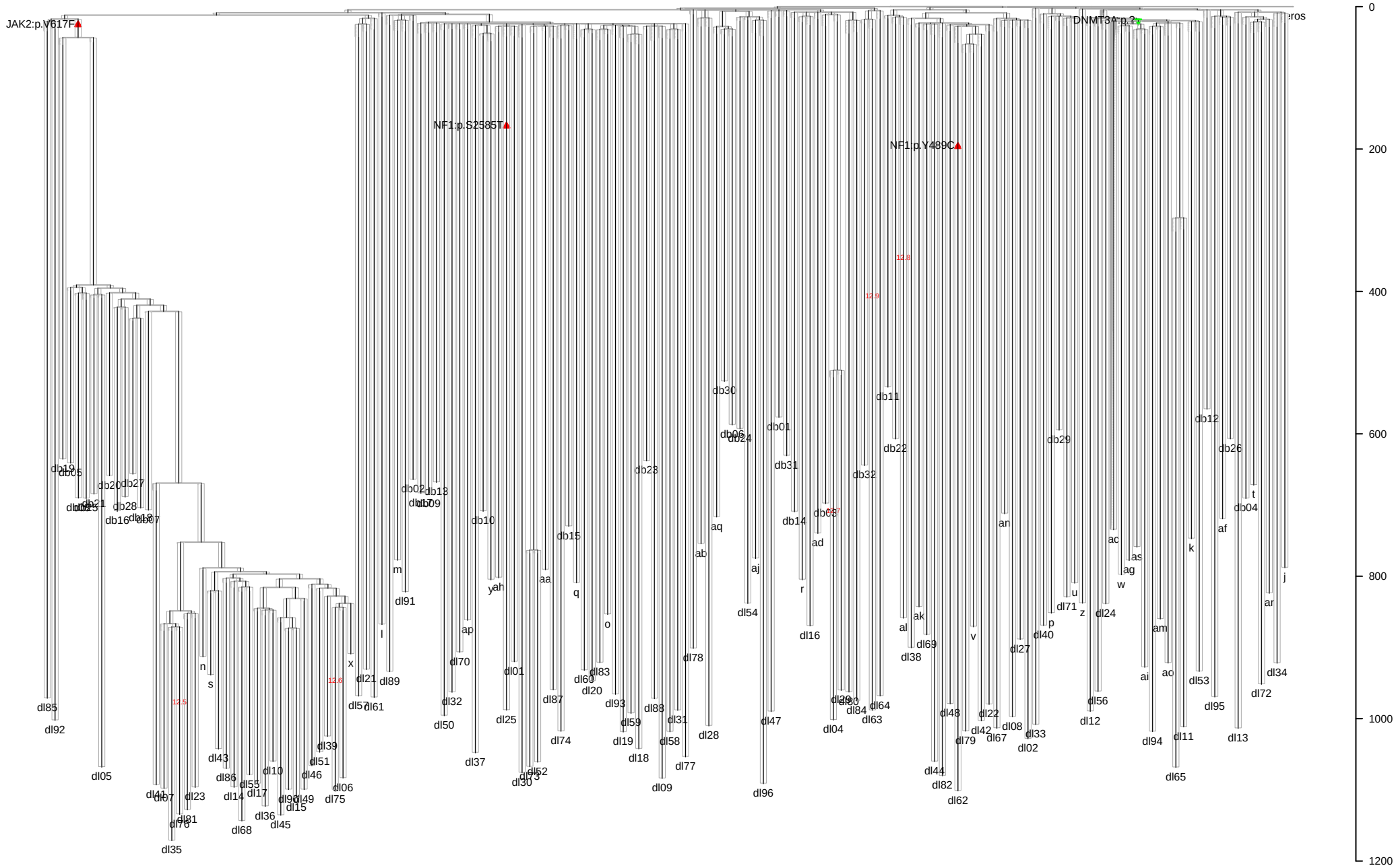
**PD5182: Annotated with VAF from dl56**
**Mean Depth=21.18**



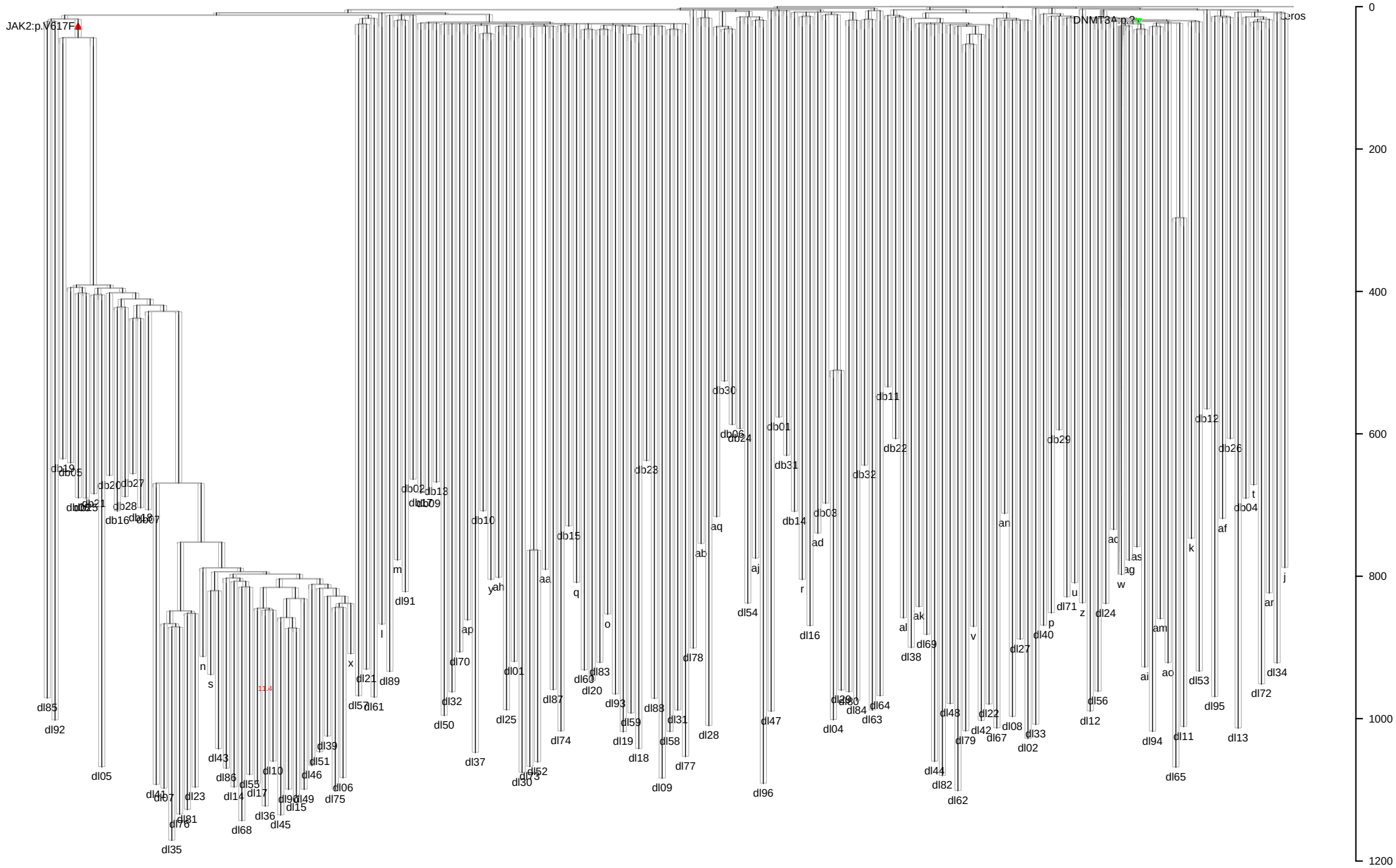
**PD5182: Annotated with VAF from dl24**
**Mean Depth=20.70**



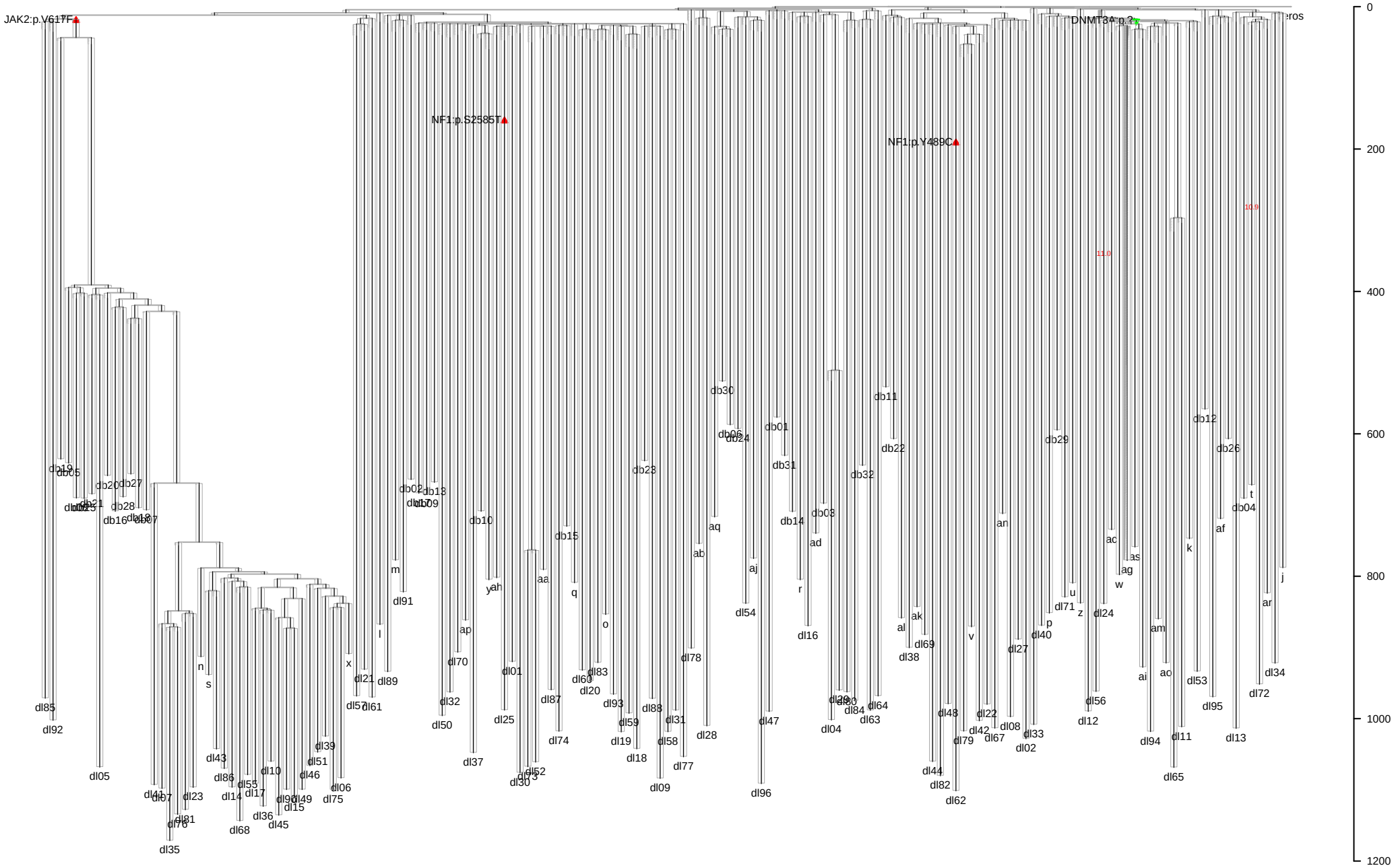
**PD5182: Annotated with VAF from ac**
**Mean Depth=13.25**



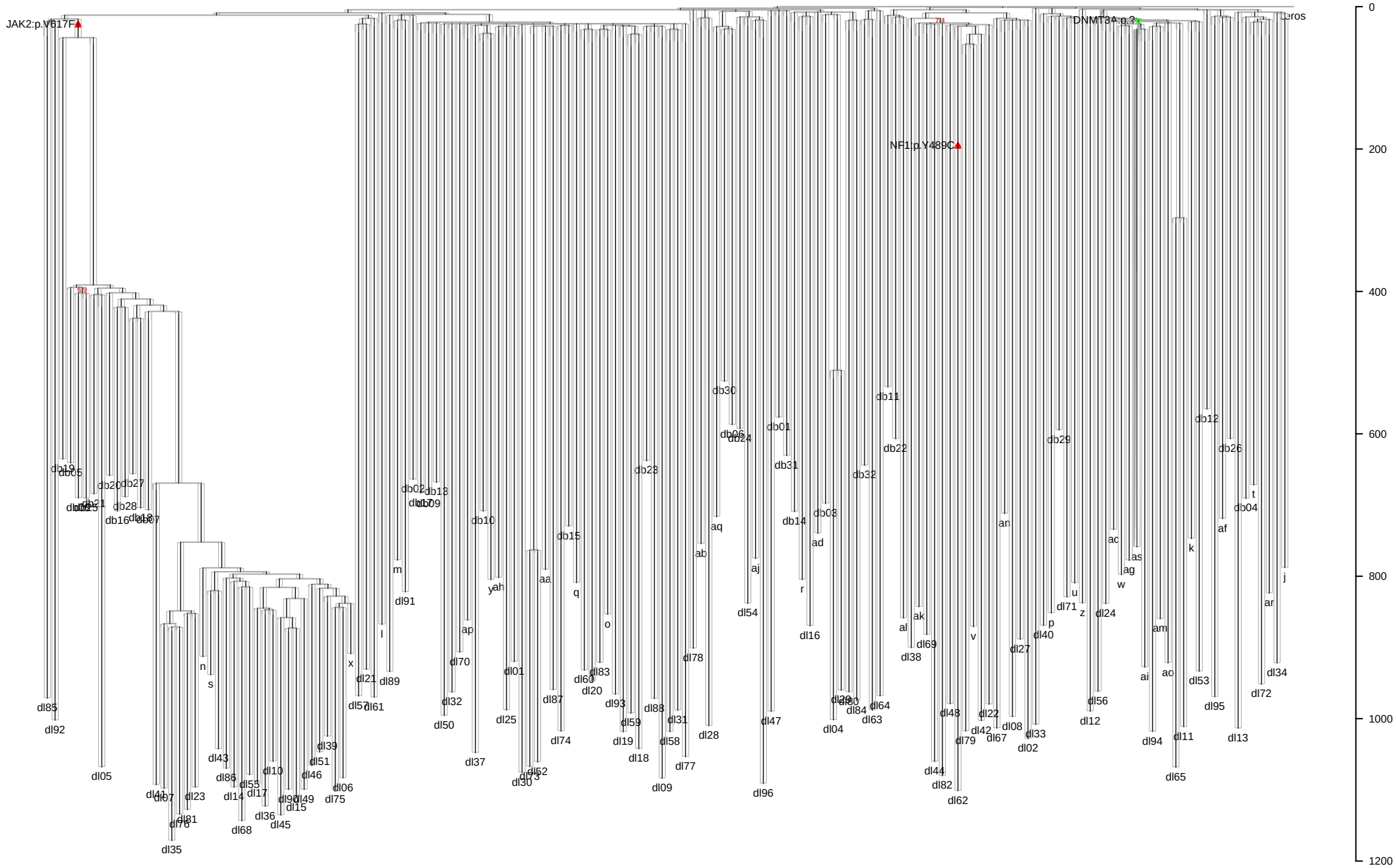
**PD5182: Annotated with VAF from w**
**Mean Depth=12.01**



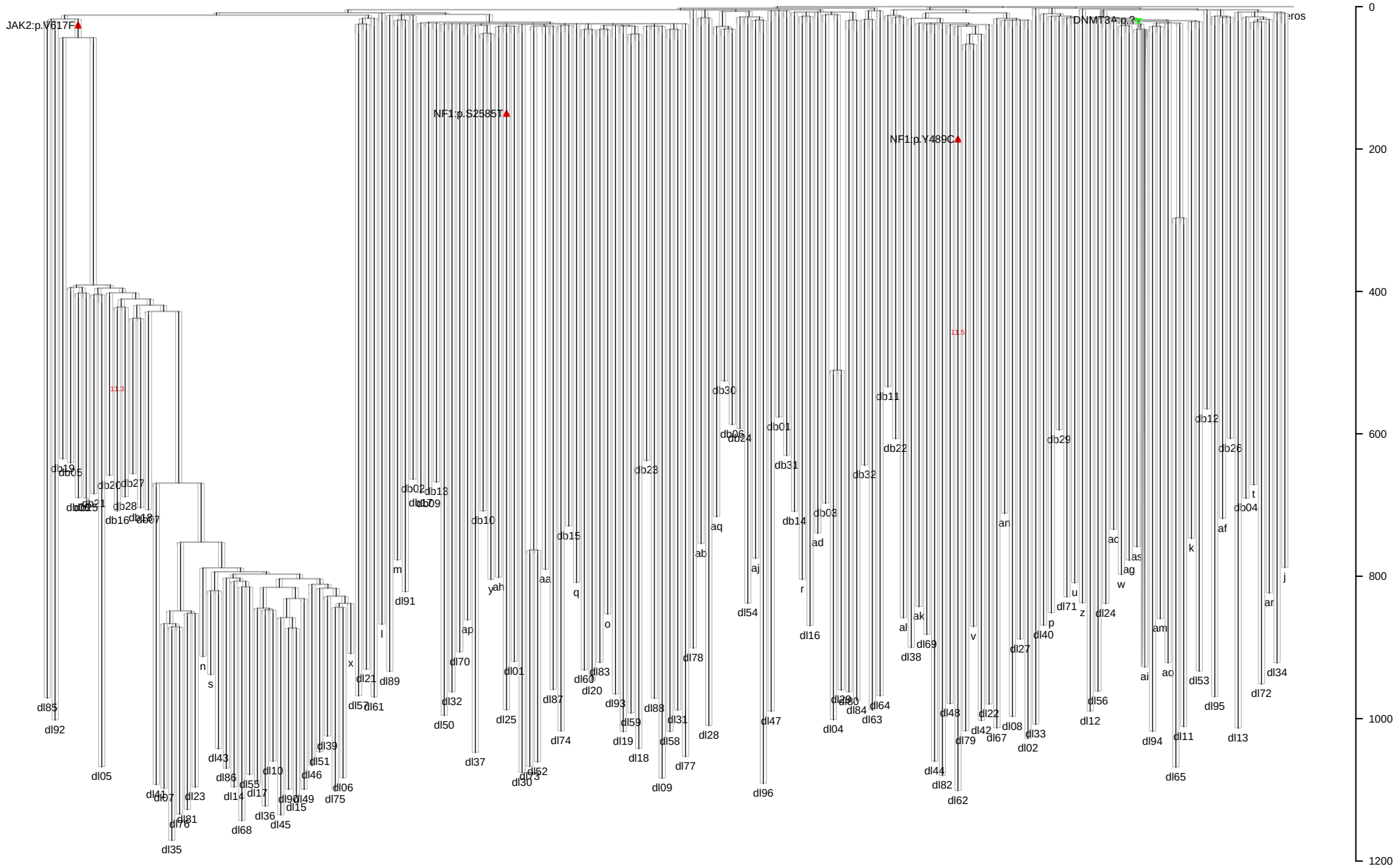
**PD5182: Annotated with VAF from ag**
**Mean Depth=11.40**



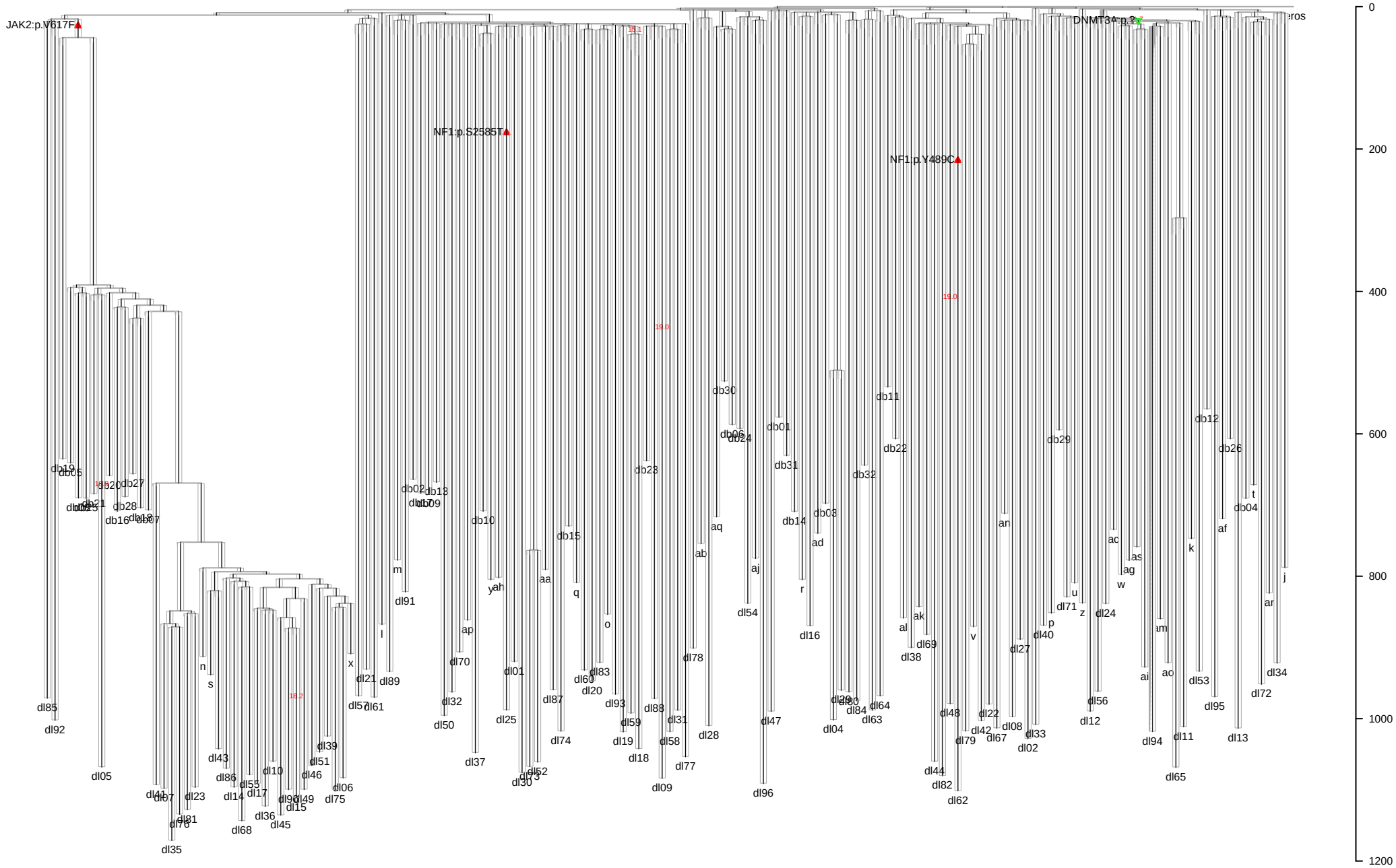
**PD5182: Annotated with VAF from as**
**Mean Depth=10.83**



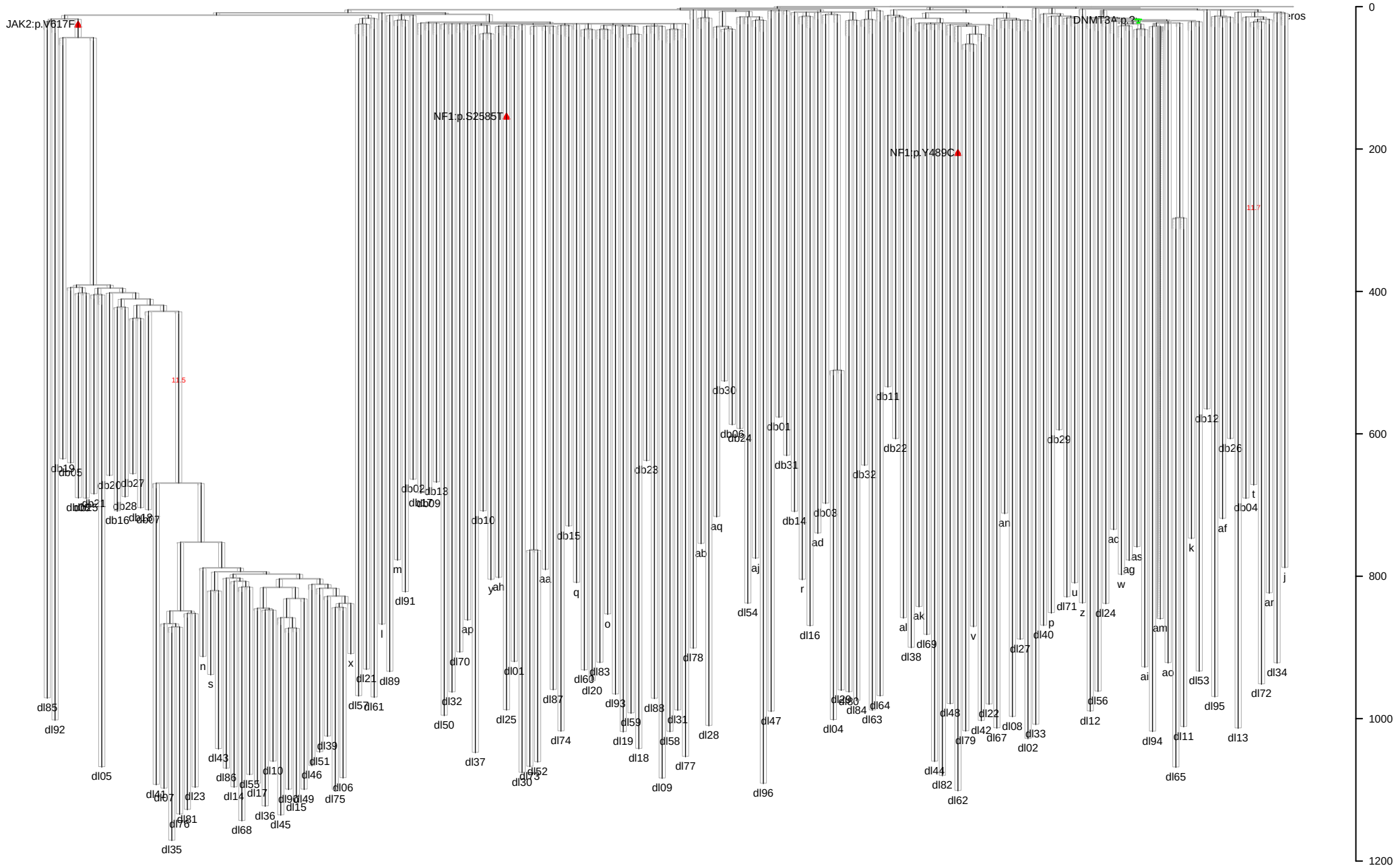
**PD5182: Annotated with VAF from ai**
**Mean Depth=11.87**



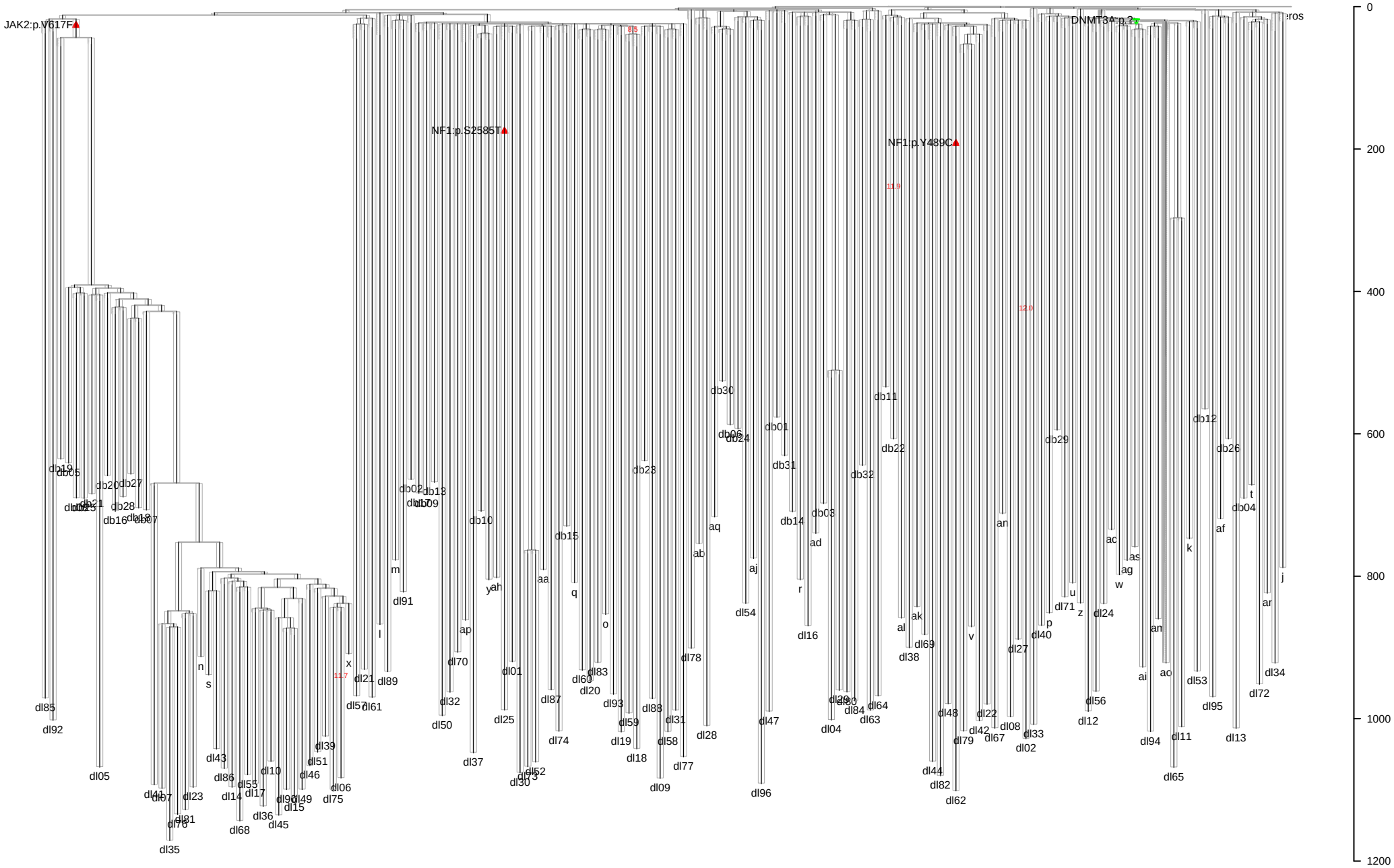
**PD5182: Annotated with VAF from dl94**
**Mean Depth=19.43**



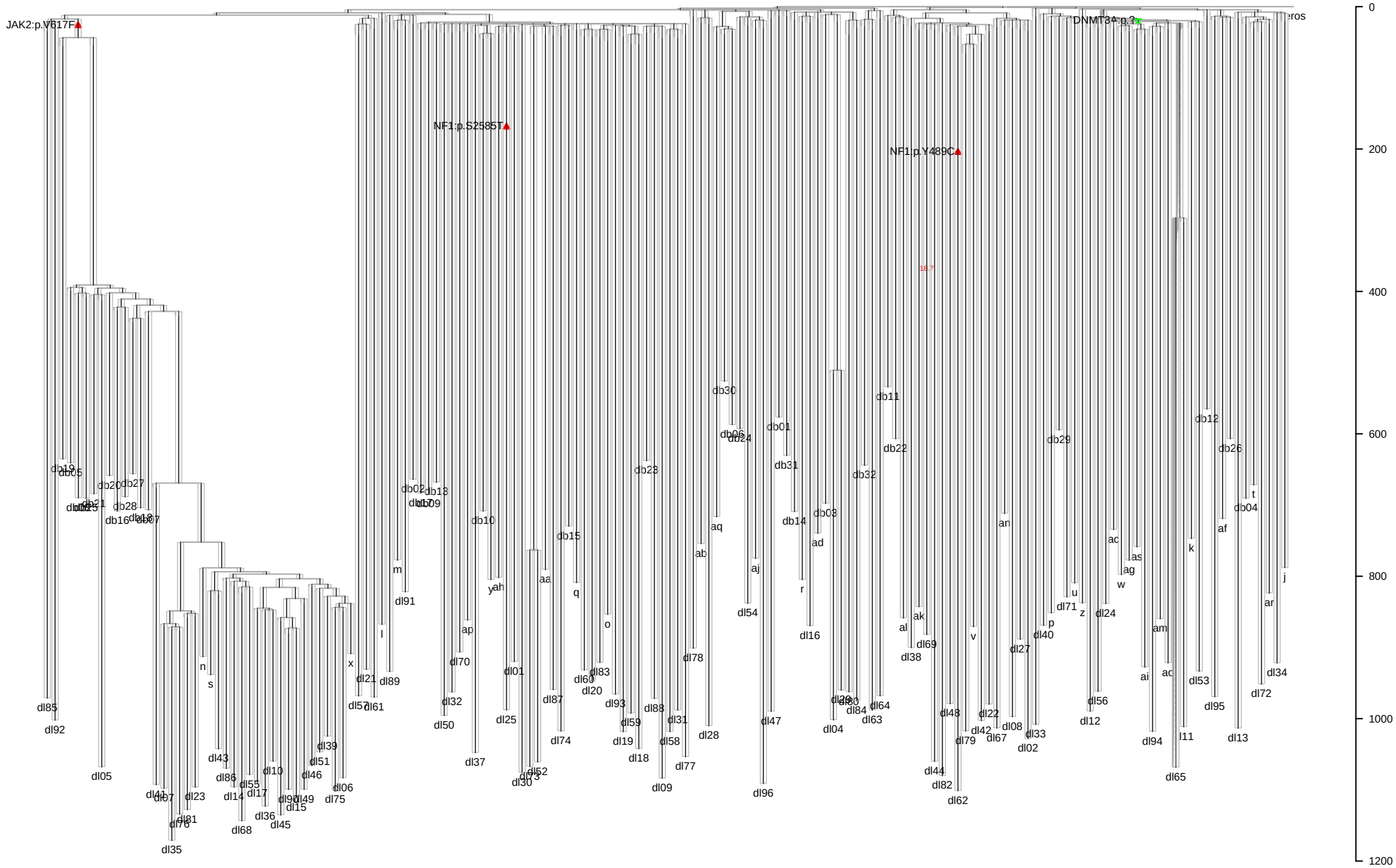
**PD5182: Annotated with VAF from am**
**Mean Depth=12.25**



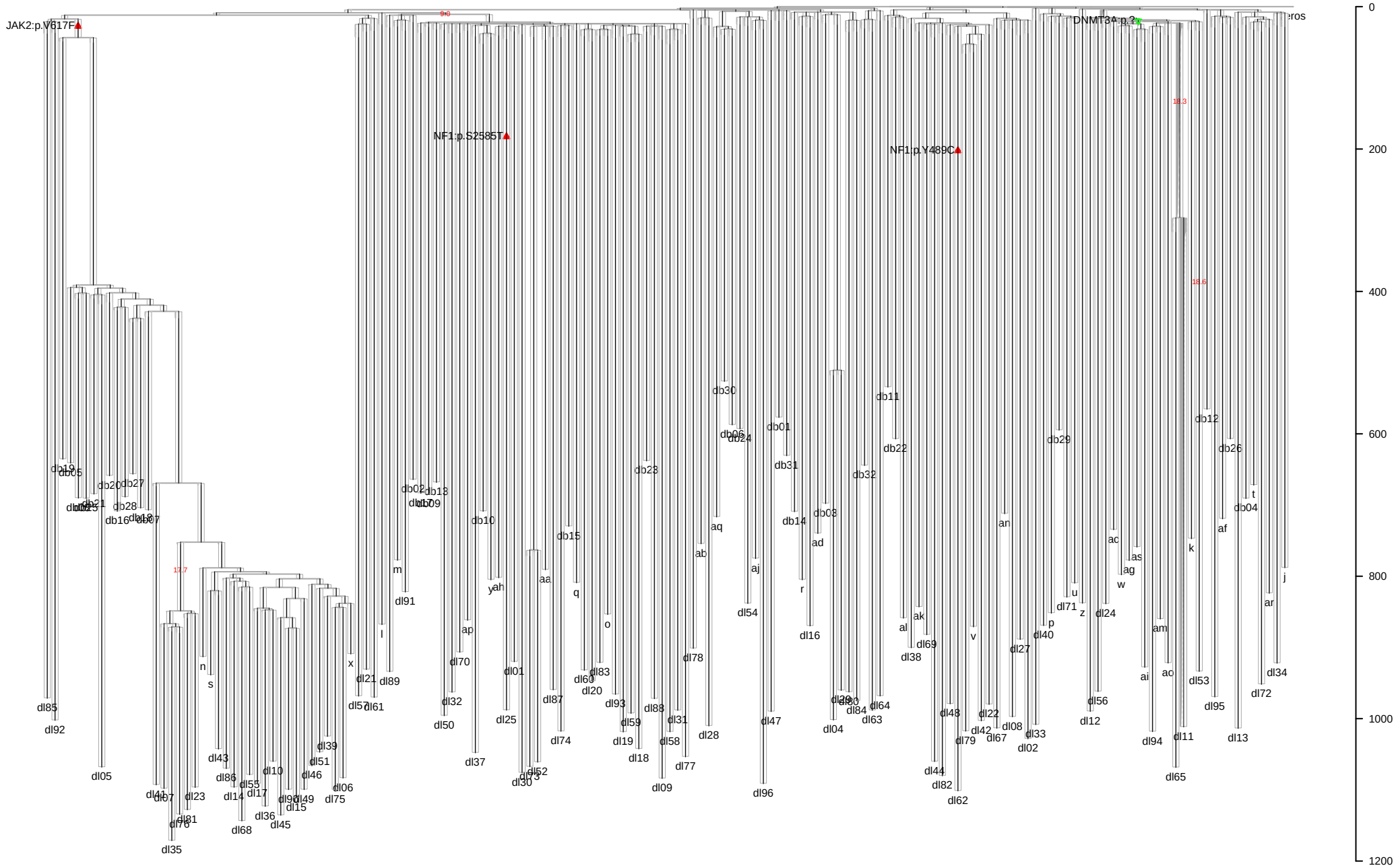
**PD5182: Annotated with VAF from ao**
**Mean Depth=12.34**



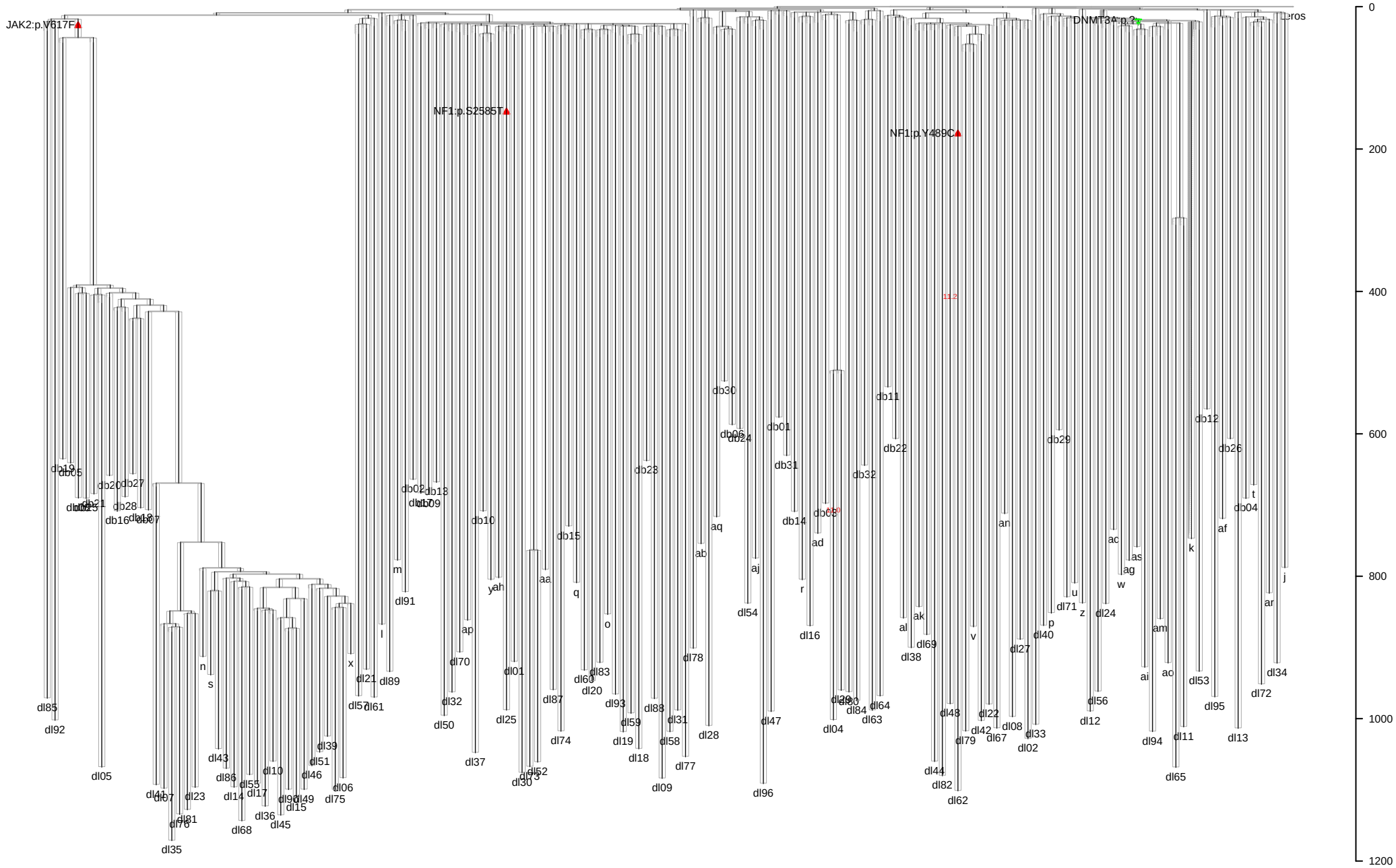
**PD5182: Annotated with VAF from dl65**
**Mean Depth=19.18**



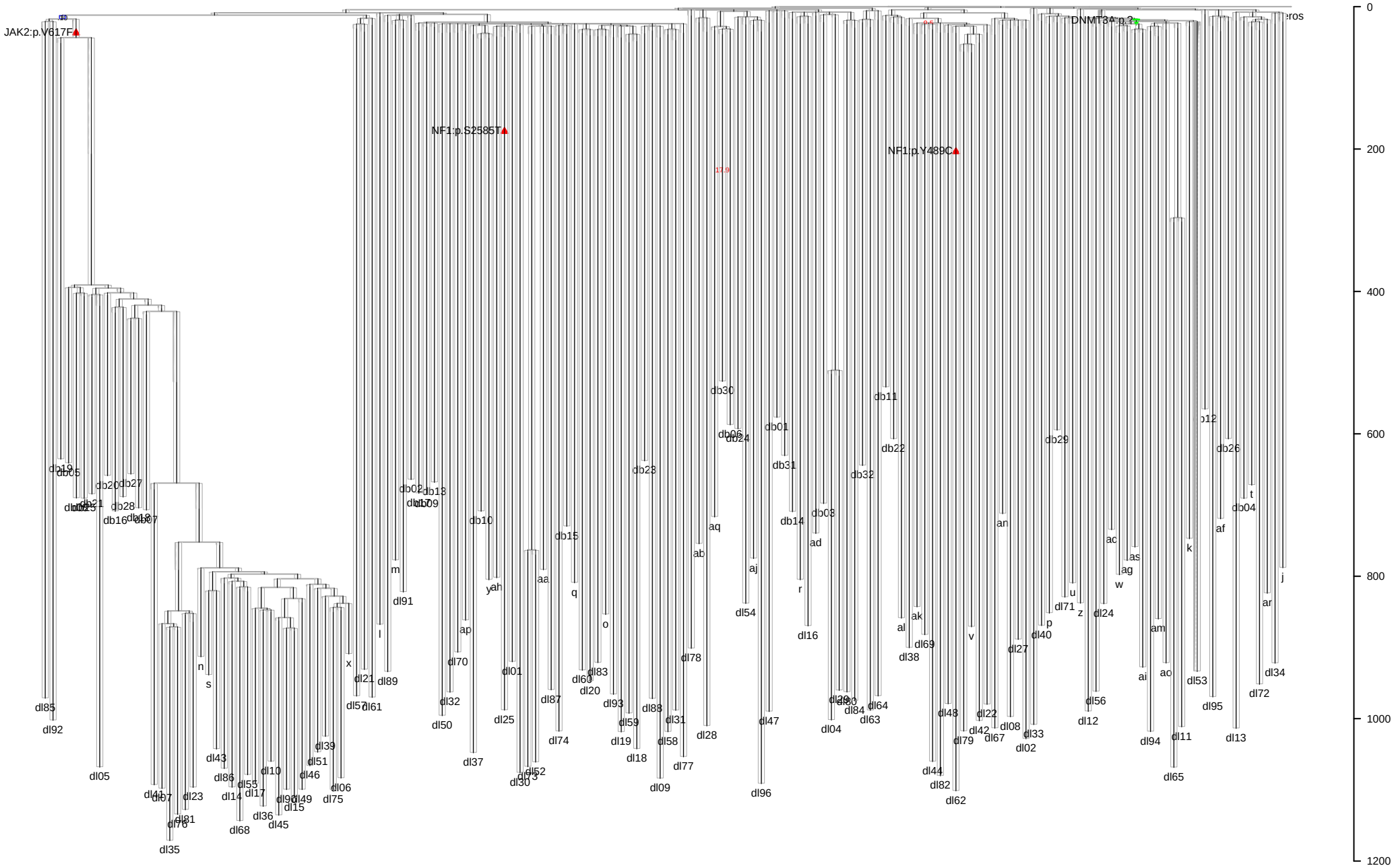
**PD5182: Annotated with VAF from dl11**
**Mean Depth=19.08**



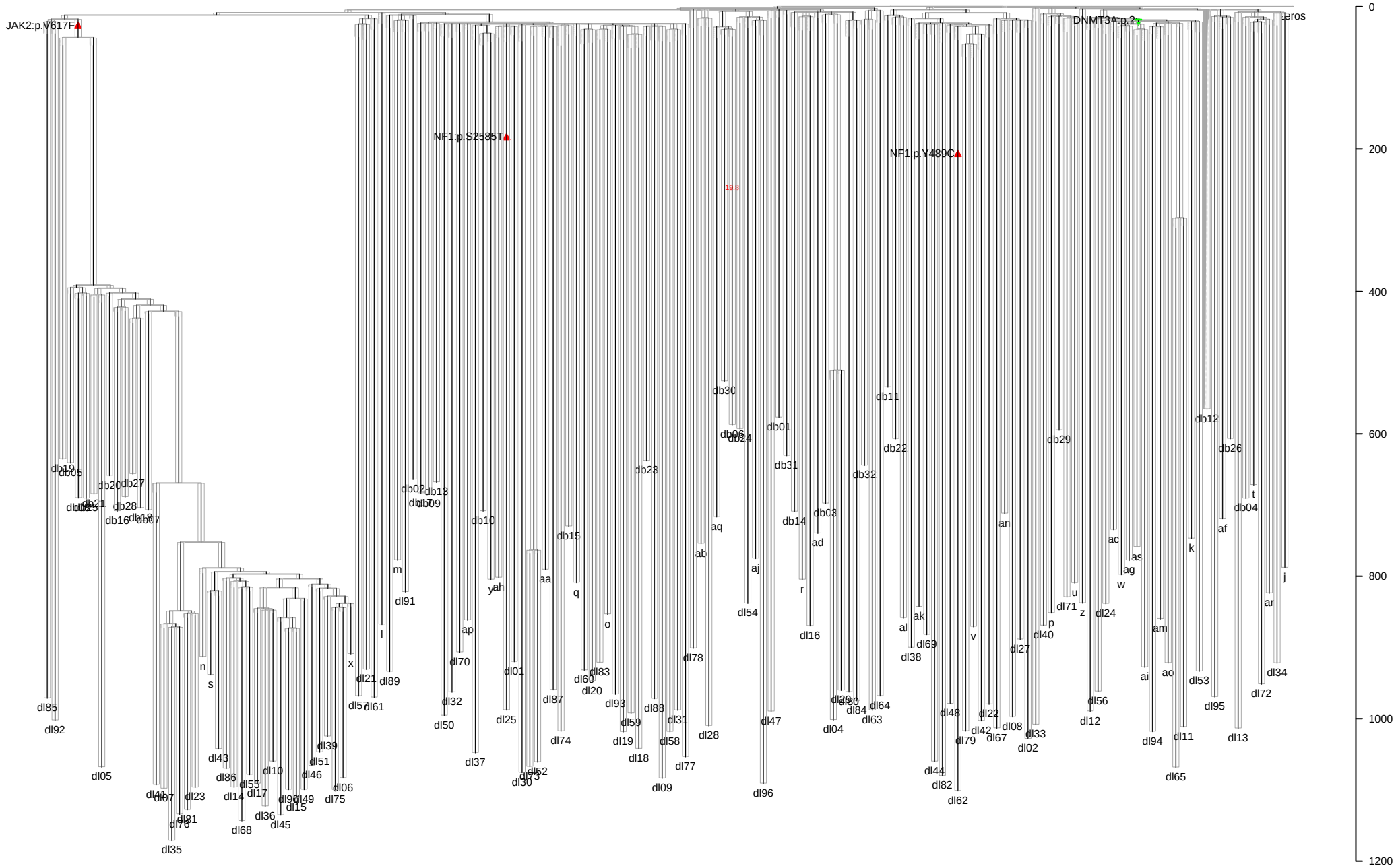
**PD5182: Annotated with VAF from k**
**Mean Depth=11.50**



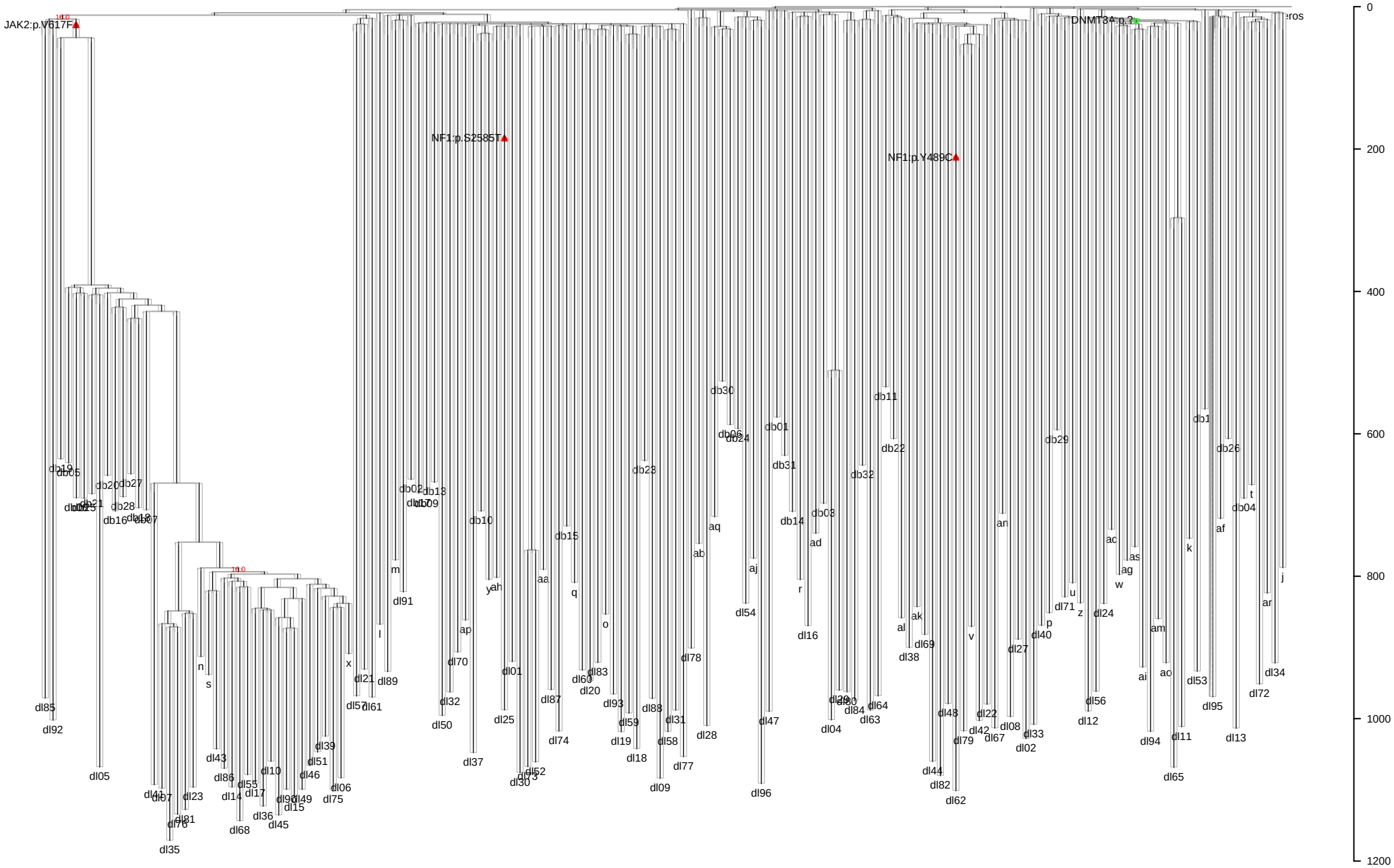
**PD5182: Annotated with VAF from dl53**
**Mean Depth=18.48**



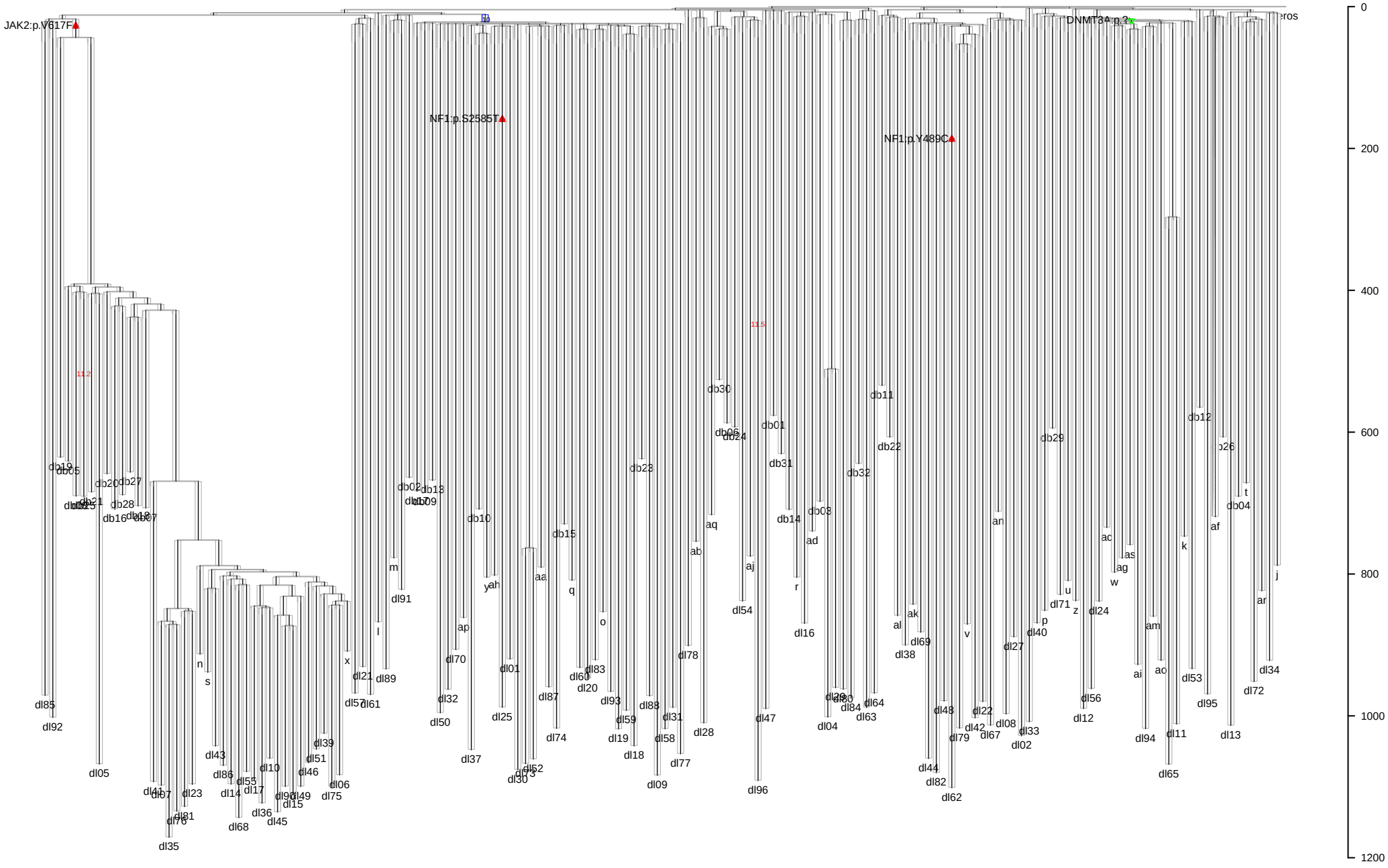
**PD5182: Annotated with VAF from db12**
**Mean Depth=20.53**



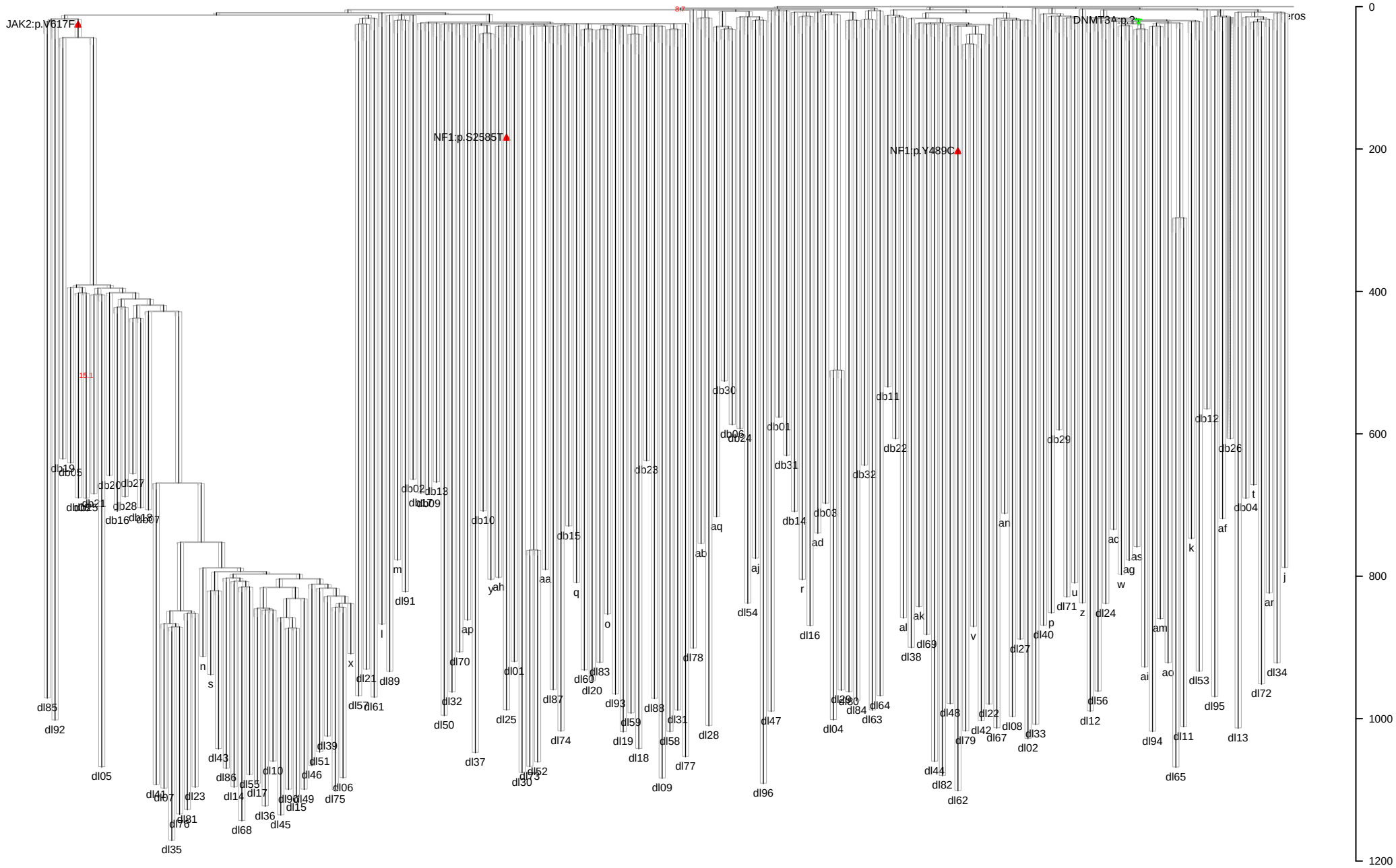
**PD5182: Annotated with VAF from dl95**
**Mean Depth=22.50**



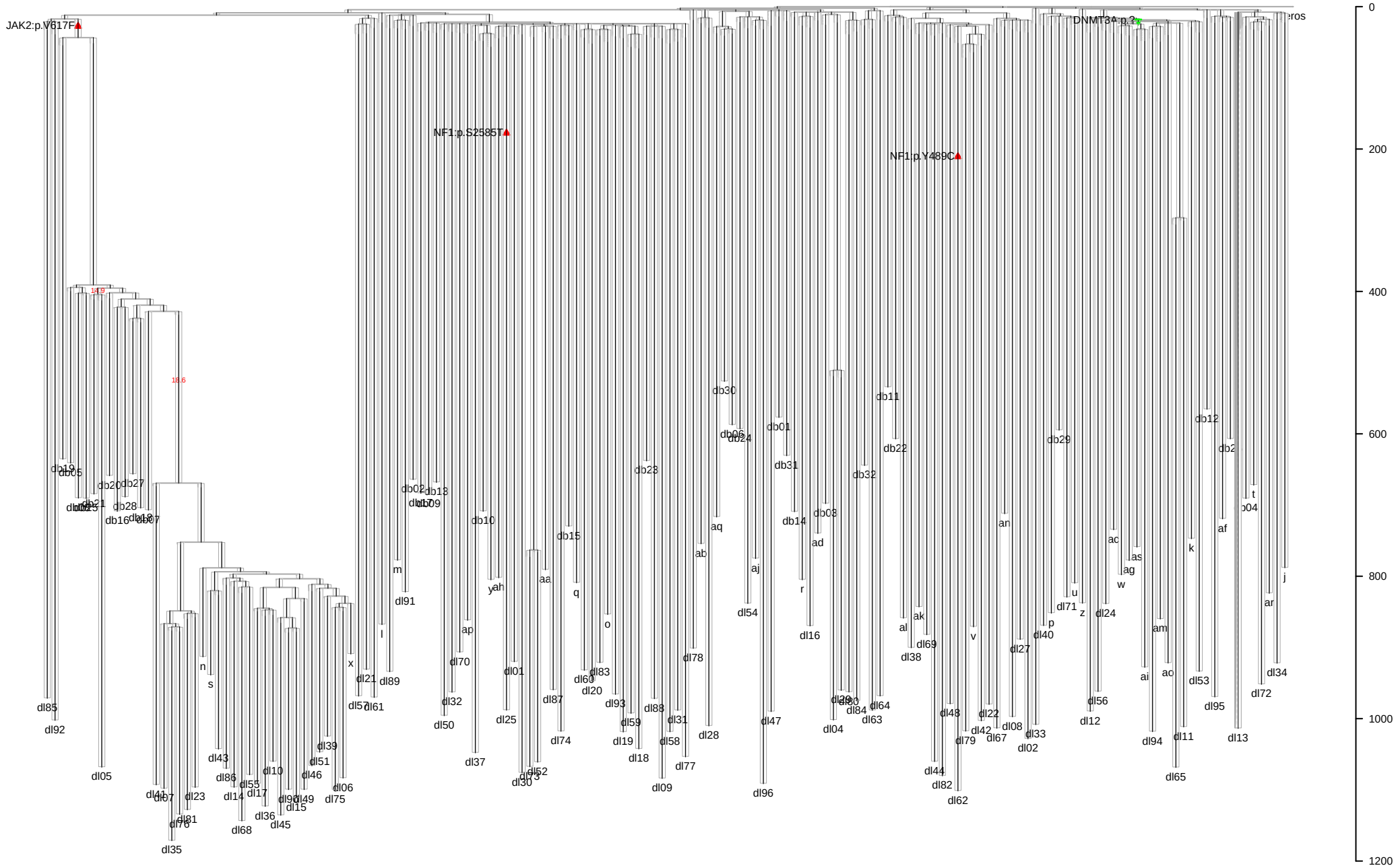
**PD5182: Annotated with VAF from af**
**Mean Depth=11.86**



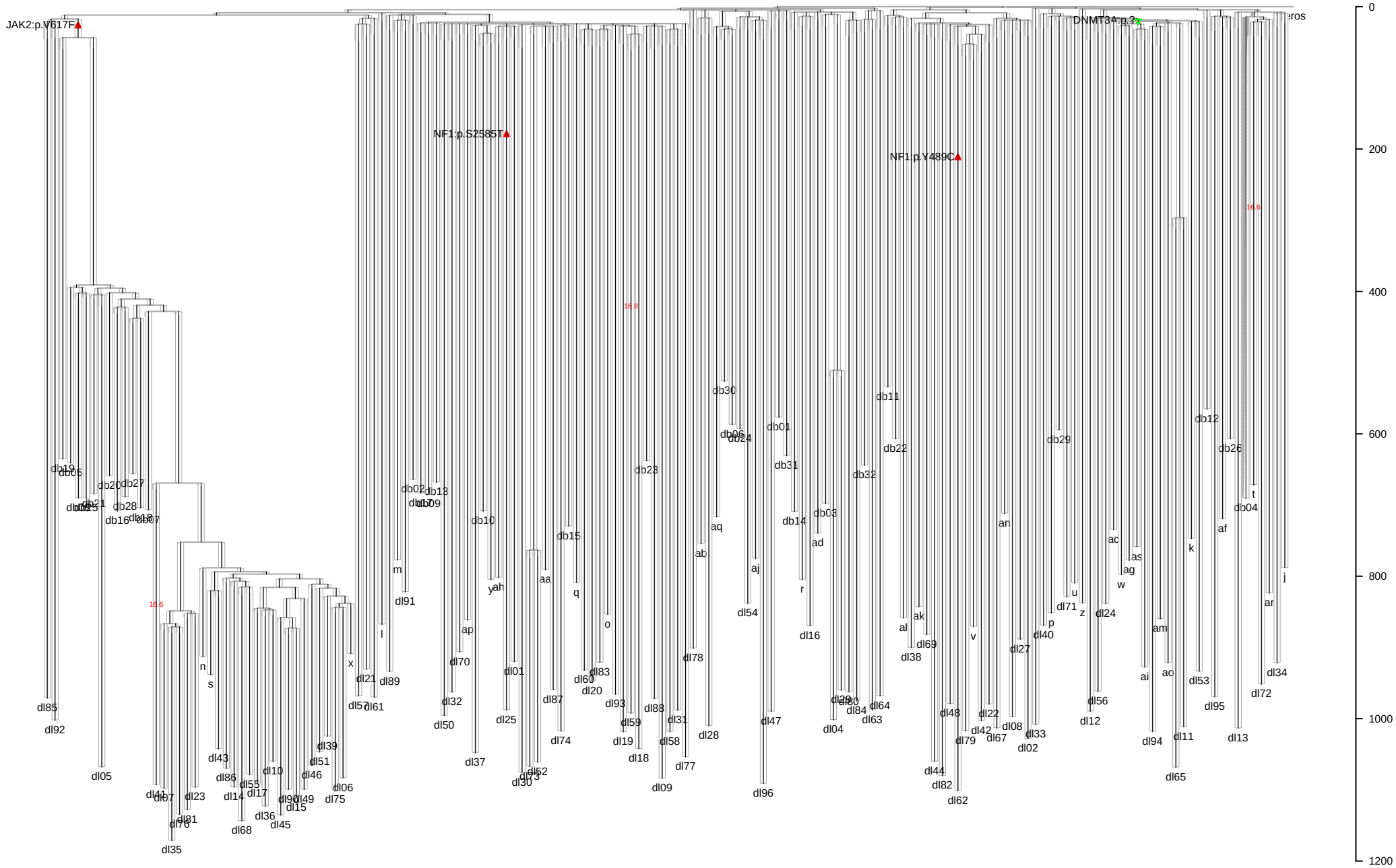
**PD5182: Annotated with VAF from db26**
**Mean Depth=15.94**



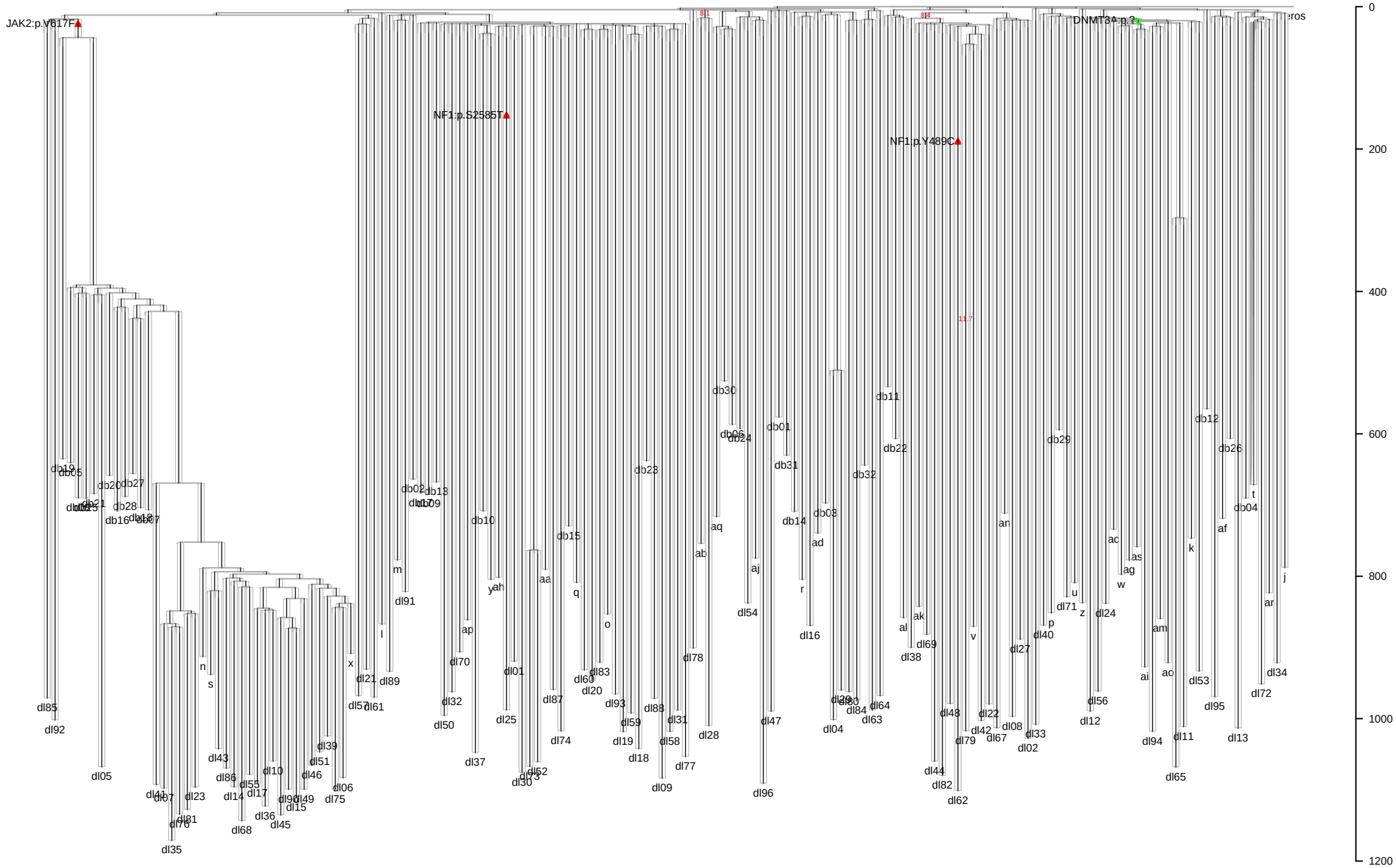
**PD5182: Annotated with VAF from dl13**
**Mean Depth=19.55**



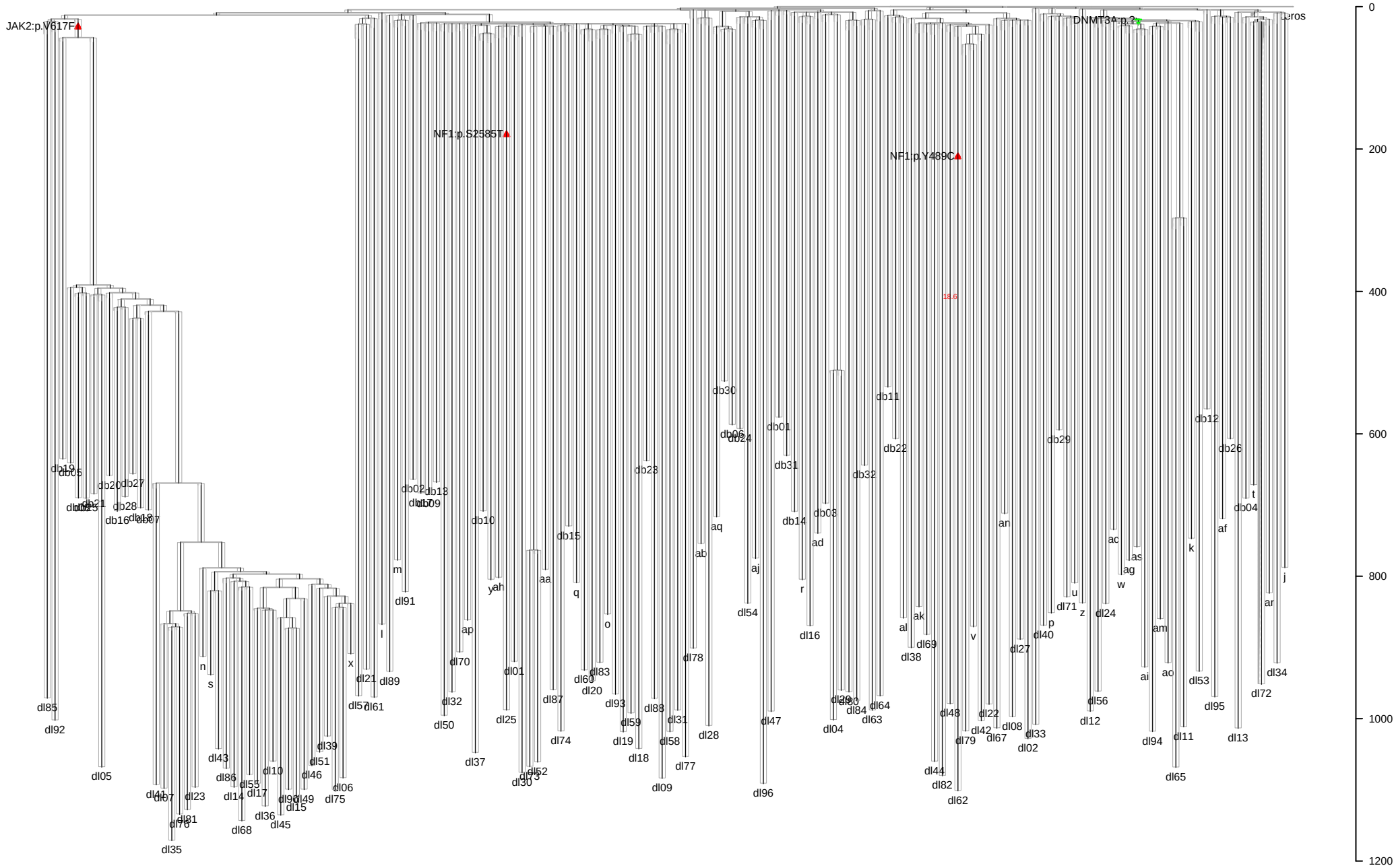
**PD5182: Annotated with VAF from db04**
**Mean Depth=17.27**



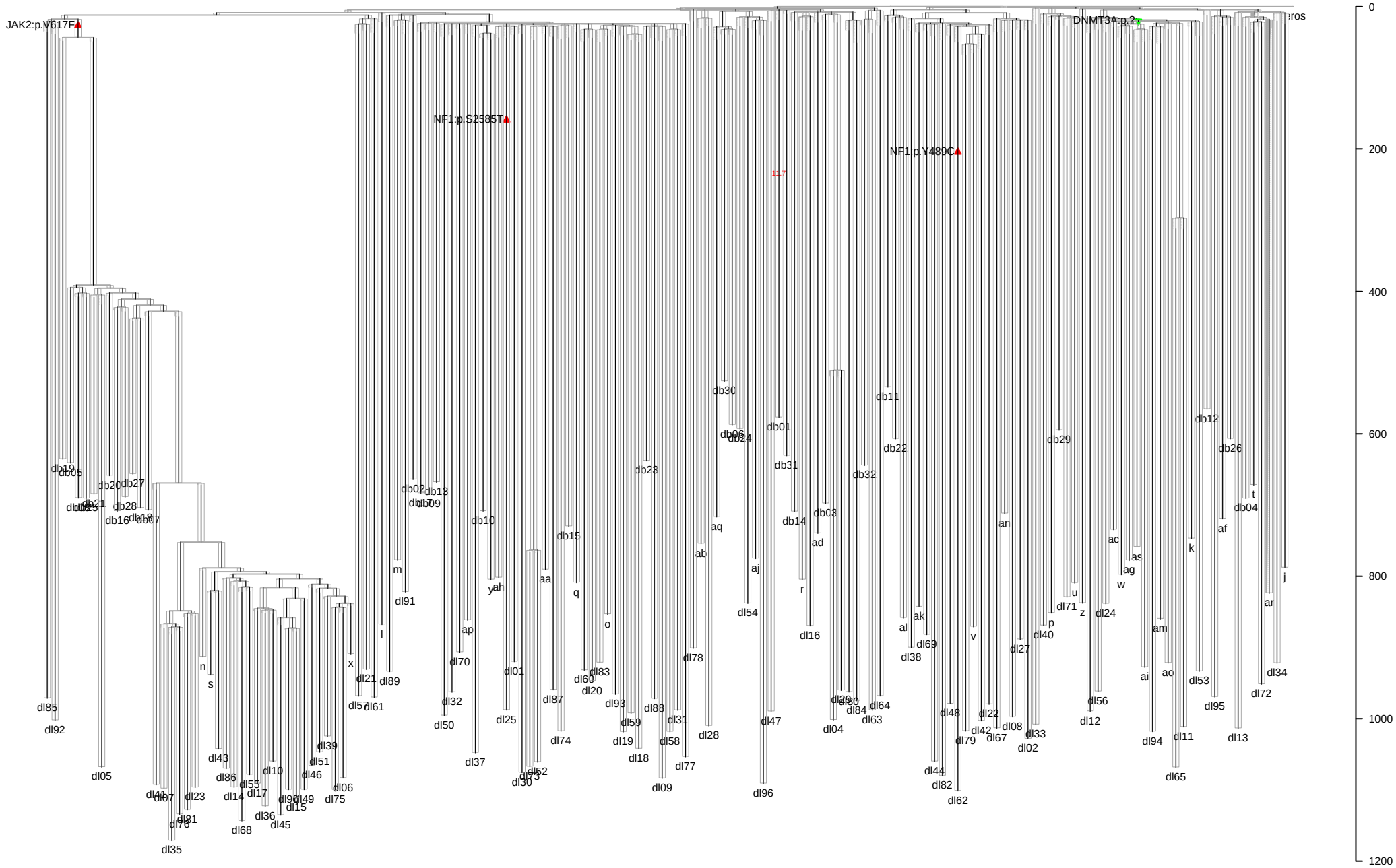
**PD5182: Annotated with VAF from t**
**Mean Depth=12.07**



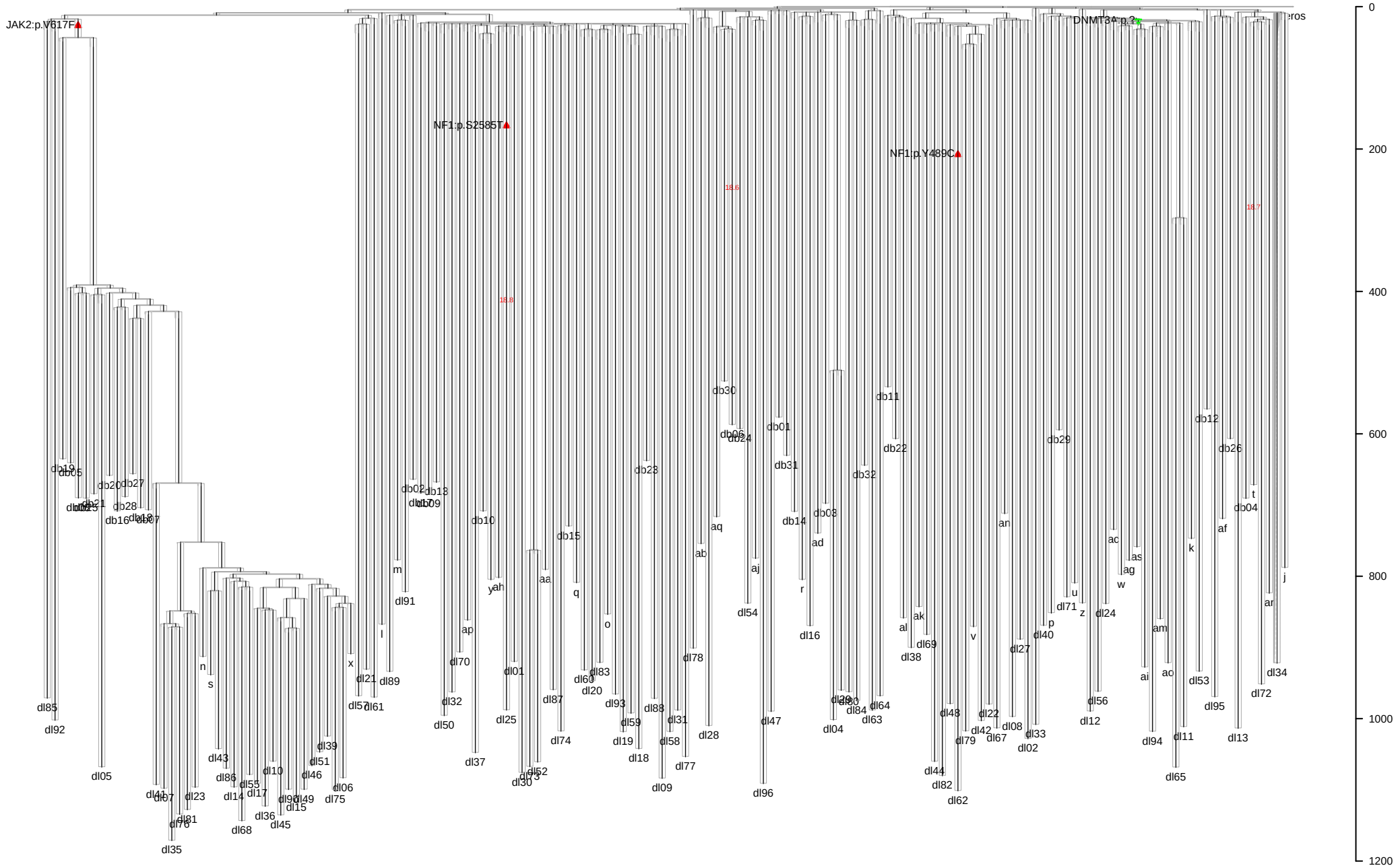
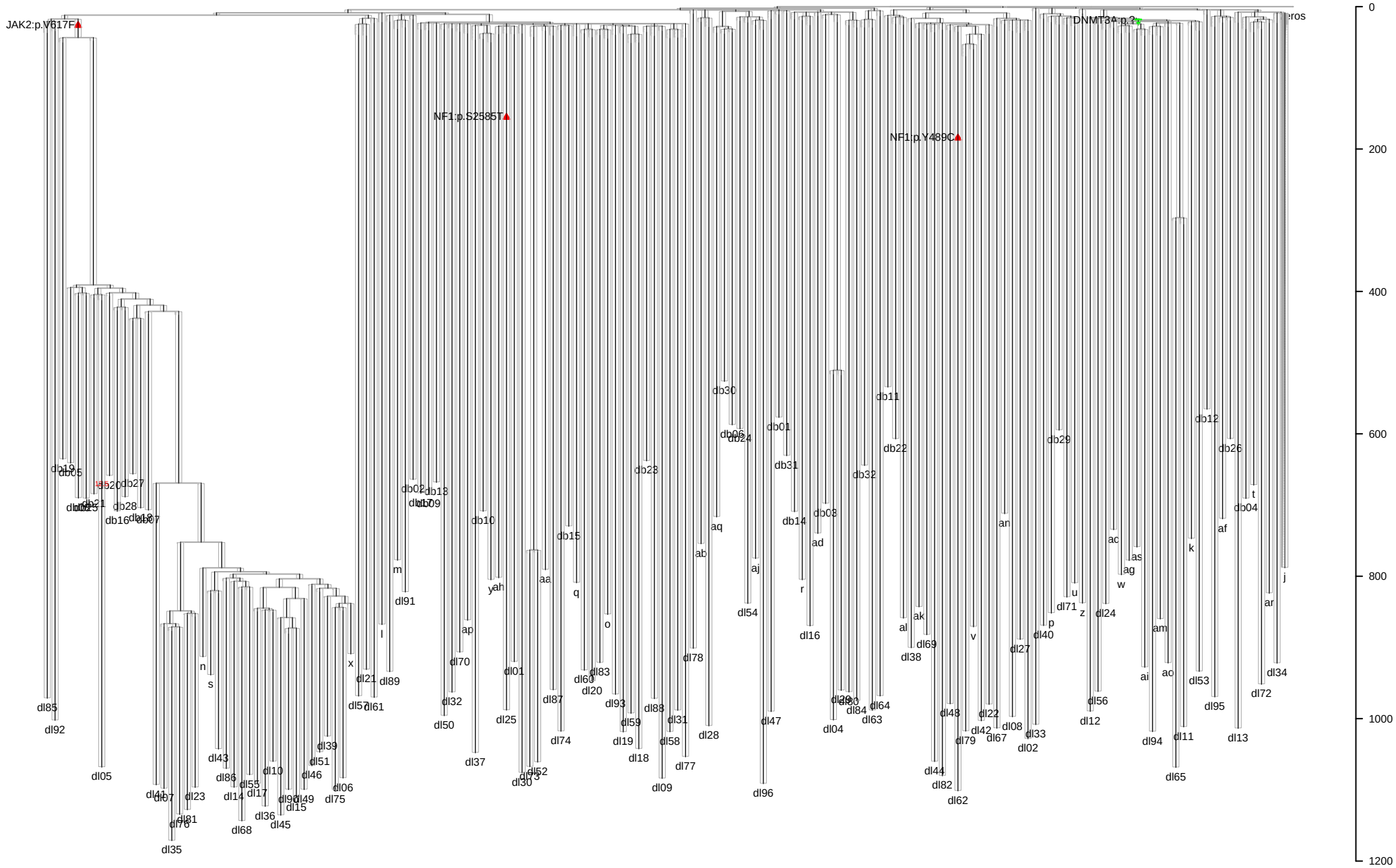
**PD5182: Annotated with VAF from dl72**
**Mean Depth=19.22**



**PD5182: Annotated with VAF from ar**
**Mean Depth=12.16**



**PD5182: Annotated with VAF from dl34**
**Mean Depth=19.33**



**PD5182: Annotated with VAF from j**
**Mean Depth=12.90**