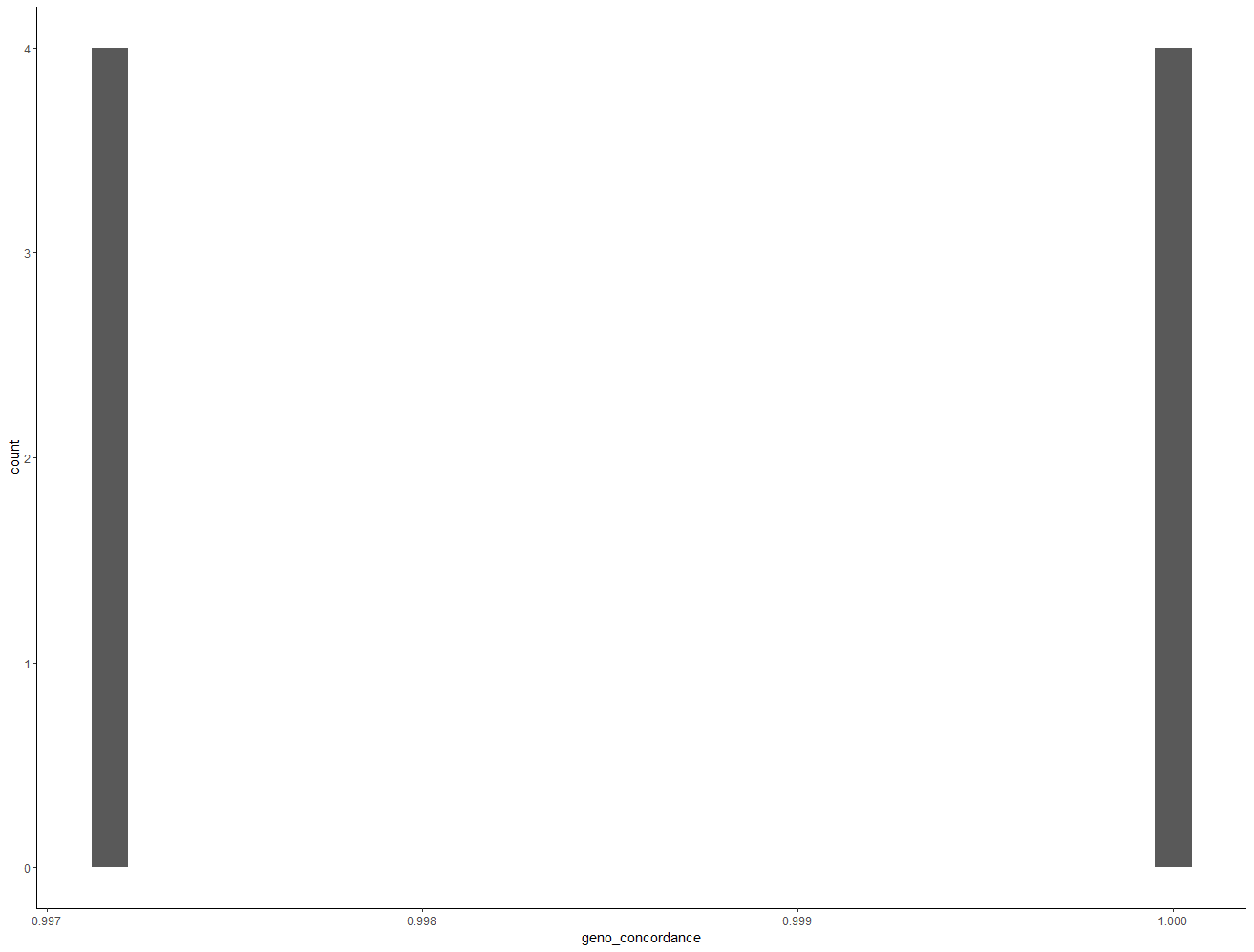
Initial dataset has 94 fastq files genotyped at 352 loci and a sex marker. 8 duplicate fastq files with repeat sample\_simple IDs are positive controls.

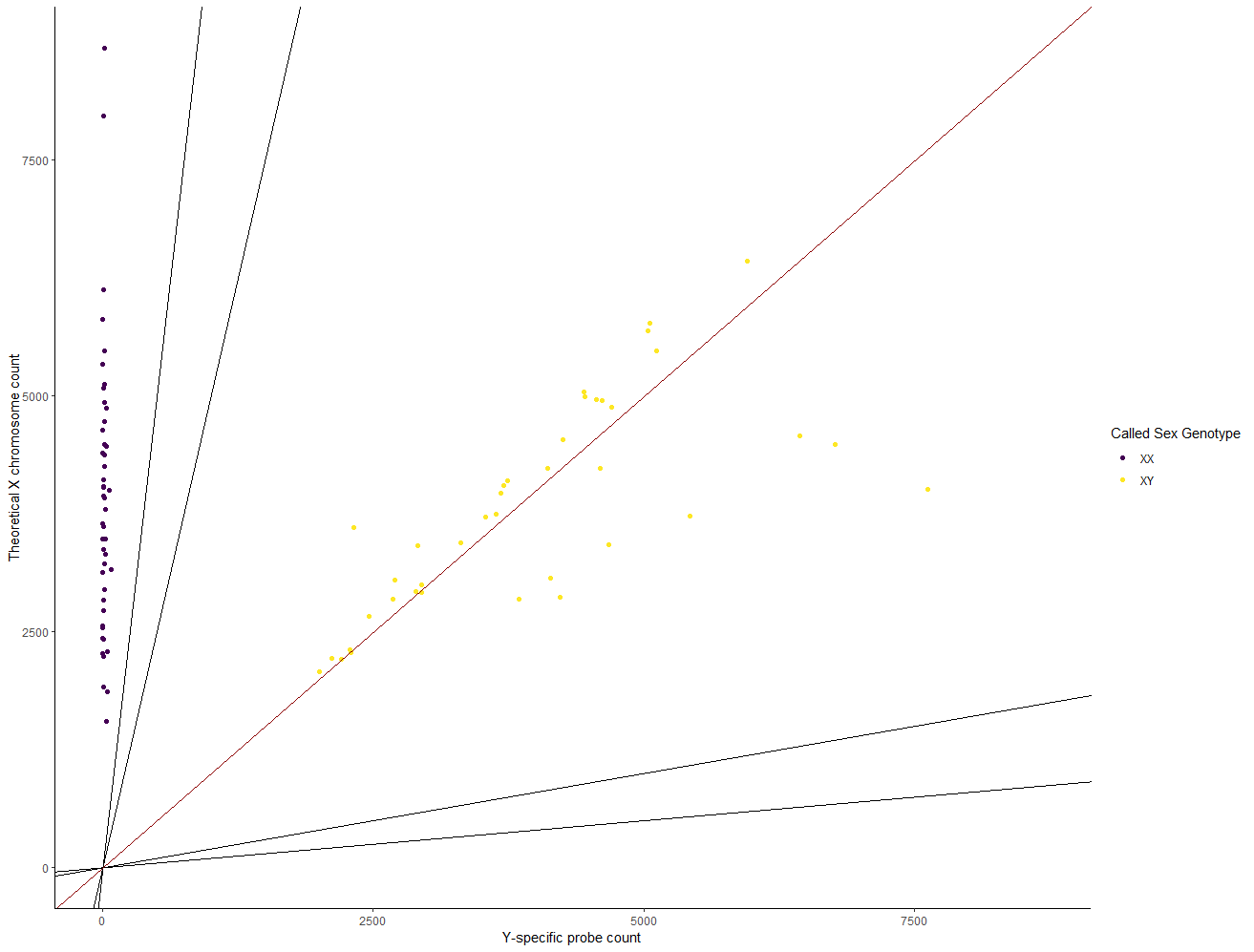
Look at concordance between 8 positive controls and their corresponding samples:



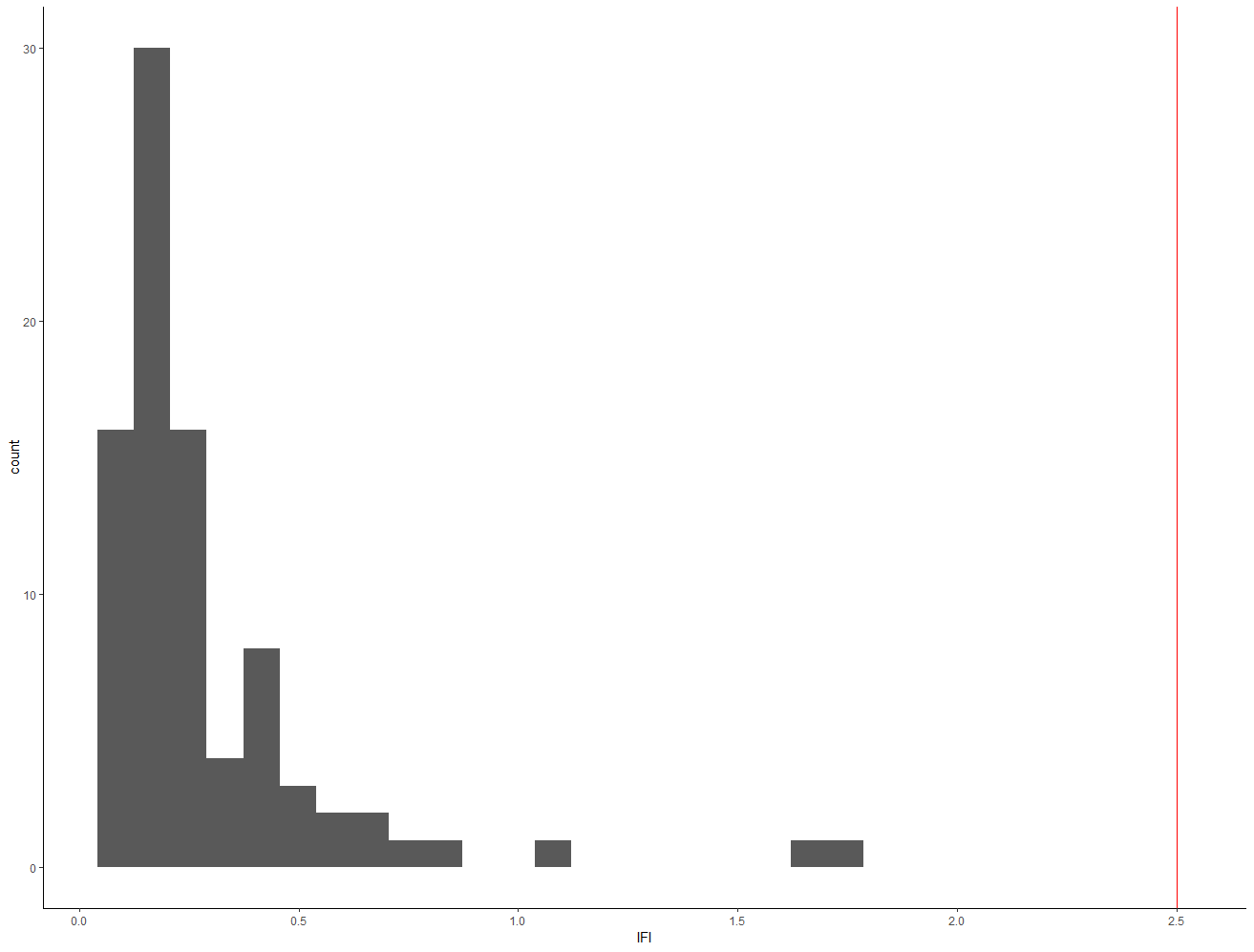
##concordance between quality controls and corresponding samples is high (0.997 - 1.0)##

Kept duplicate samples with the higher genotyping success. Removed duplicates with lesser genotyping success.

##dataset now has 86 unique samples genotyped at 352 loci and one sex marker##

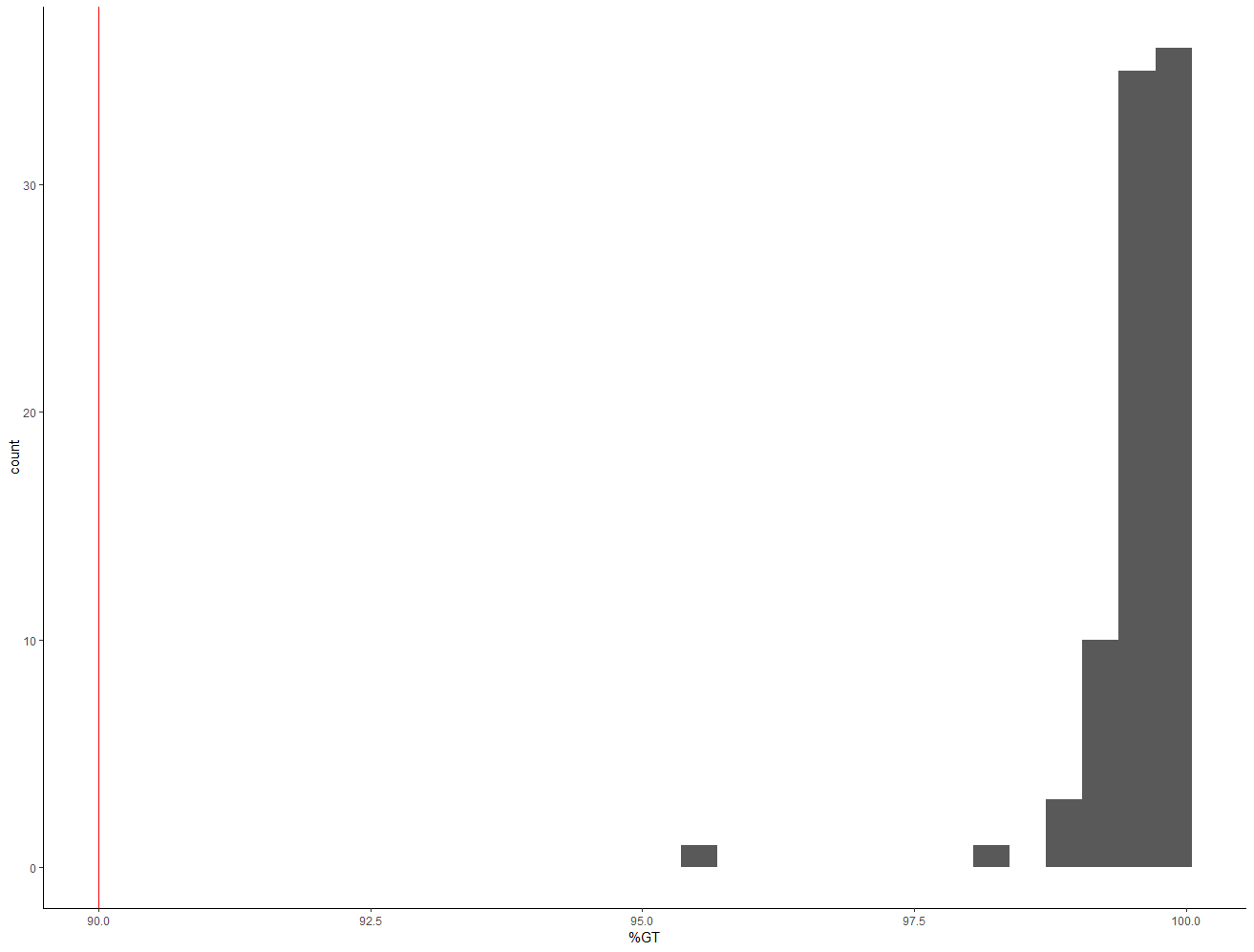


###Sex marker looks good. Leave as is without "correction" script##

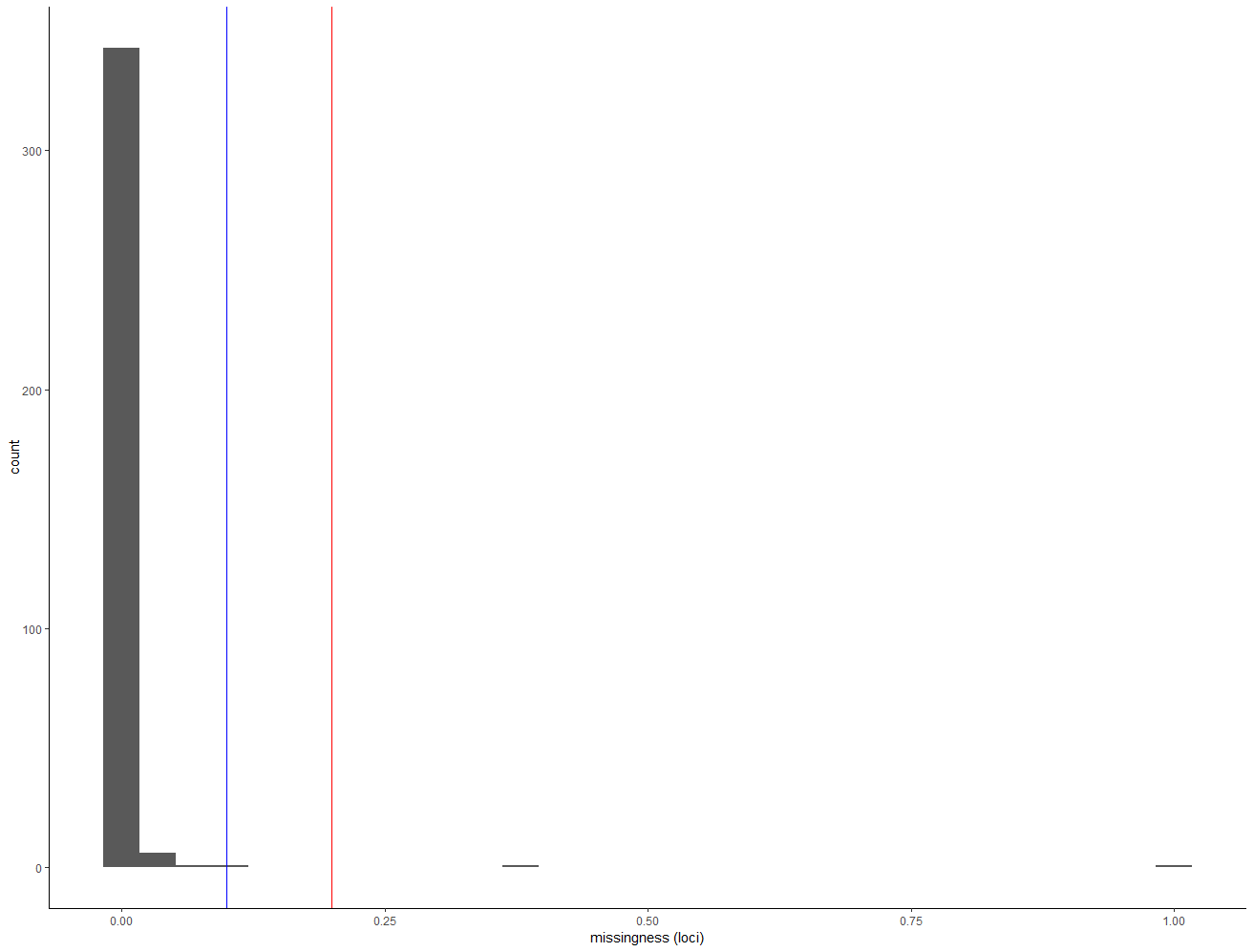


Filter individuals/markers based on call rates/IFI scores:

Initial IFI scores. All samples have good IFI scores.



All samples are well genotyped. All samples have greater than 90% call rates



Most loci are well genotyped. Two missing in more than 20% of individuals. One (Ots\_wenYhap\_33126) not genotyped in any individual.

Removed locus not genotyped in any individual. Recalculate individual call rates.

0 individuals have call rates below 90%

1 marker missing in more than 20% of individuals (Ots\_RAS1)

Removed this marker. Recalculate IFI scores.

0 individuals have IFI scores greater than 2.5.

##At this point the dataset has 86 Individuals and 350 loci and a sex marker##

##Individual call rates range 95.7 - 100%; Marker call rates range 89 - 100%

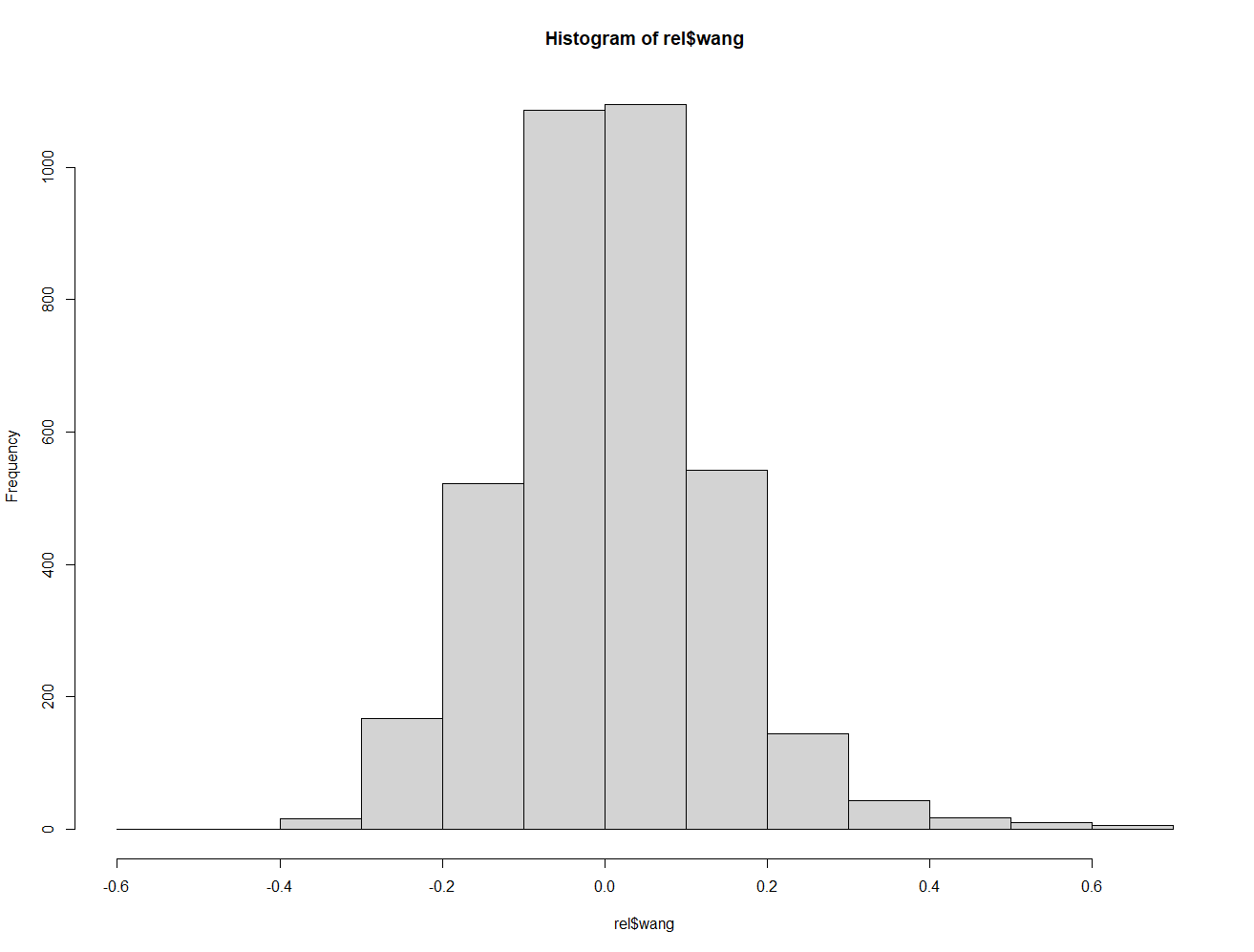
##IFI ranges 0.09 - 1.71##

Evaluate for potential PSVs:

##1 marker is potential paralog

Ots\_MetA

Removed it.



No duplicate samples detected with relatedness in coancestry

##74 monomorphic markers##

##"Ots11\_11925999" "Ots11\_32418659" "Ots17\_1066109\_C6" "Ots17\_1345774\_C6" "Ots17\_1486479\_C6" "Ots17\_1488679\_C6" "Ots17\_885364" "Ots18\_32088284"

#"Ots19\_46172133" "Ots19\_46172427" "Ots28\_11202190" "Ots28\_11205423" "Ots28\_11206740" "Ots2\_42405643" "Ots33\_19359879" "Ots4\_40942276"

#"Ots4\_41638710" "Ots4\_64978818" "Ots5\_44795073" "Ots5\_70908626" "Ots7\_51409415" "Ots7\_53631522" "Ots7\_54212944" "Ots9\_28975221"

#"Ots\_123048-521" "Ots\_123921-111" "Ots\_127760-569" "Ots\_129144-472" "Ots\_129870-55" "Ots\_97660-56" "Ots\_ARNT" "Ots\_CCR7"

##"Ots\_CHI06027687\_143477" "Ots\_CHI06048618\_5222" "Ots\_GH2" "Ots\_GPH-318" "Ots\_GST-207" "Ots\_GST-375" "Ots\_GTH2B-550" "Ots\_GnRH-271"

#"Ots\_IGF-I\_1-76" "Ots\_IL8R\_C8" "Ots\_Ikaros-250" "Ots\_IsoT" "Ots\_LWSop-638" "Ots\_Myc-366" "Ots\_NFYB-147" "Ots\_SL"

#"Ots\_U2362-330" "Ots\_U2567-104" "Ots\_crRAD18937-60" "Ots\_crRAD23631-48" "Ots\_crRAD255-59" "Ots\_crRAD26081-28" "Ots\_crRAD46081-56" "Ots\_crRAD46751-42"

#"Ots\_crRAD55400-59" "Ots\_hnRNPL-533" "Ots\_hsc71-3'-488" "Ots\_nkef-192" "Ots\_nramp-321" "Ots\_pigh-105" "Ots\_stk6-516" "Ots\_tpx2-125"

#"Ots\_txnip-321" "Ots\_u07-20\_332" "Ots\_u07-25\_325" "Ots\_u07-64\_221" "Ots\_u1008-108" "Ots\_u211-85" "Ots\_wenYhap\_106664\_9" "Ots\_wenYhap\_25067\_92"

#"Ots\_wenYhap\_71572" "Ots\_zn593-346"

At this point the dataset has 86 individuals and 275 markers and a sex marker.