

runIGdetective\_noCorr

↔ input

/home1/zhuyixin/sc1/AssmQuality/assemblies/{species}.alt.fasta  
/home1/zhuyixin/sc1/AssmQuality/assemblies/{species}.pri.fasta  
code/igDetective.sh

output →

/home1/zhuyixin/sc1/AssmQuality/igGene/{species}.alt.igdetective/combined\_genes\_IGL.txt  
/home1/zhuyixin/sc1/AssmQuality/igGene/{species}.pri.igdetective/combined\_genes\_IGL.txt



geneLociAutomate

↔ input

/home1/zhuyixin/sc1/AssmQuality/igGene/{species}.alt.igdetective/combined\_genes\_IGL.txt  
/home1/zhuyixin/sc1/AssmQuality/igGene/{species}.pri.igdetective/combined\_genes\_IGL.txt  
code/geneLociAutomated.sh

output →

gene\_position/{species}/alt/{species}\_IGK\_pos.sorted.bed  
gene\_position/{species}/alt/{species}\_IGL\_pos.sorted.bed  
gene\_position/{species}/pri/{species}\_IGL\_pos.sorted.bed



mergeLoci

↔ input

code/mergePriAlt.sh  
gene\_position/{species}/alt/{species}\_IGL\_pos.sorted.bed  
gene\_position/{species}/pri/{species}\_IGL\_pos.sorted.bed

output →

gene\_position/{species}/combined/{species}\_IGH\_pos.sorted.bed  
gene\_position/{species}/combined/{species}\_IGK\_pos.sorted.bed  
gene\_position/{species}/combined/{species}\_IGL\_pos.sorted.bed



dataPrepAutomate

↔ input

code/dataPrepAutomated.sh

output →

aligned\_bam/{species}/{species}\_merged\_sorted.bam  
aligned\_bam/{species}/{species}\_merged\_sorted.bam.bai



convertPrimaryBam

↔ input

aligned\_bam/{species}/{species}\_merged\_sorted.bam

output →

aligned\_bam/{species}/{species}\_merged\_sorted\_primary.bam



cigarProcessing

↔ input

aligned\_bam/{species}/{species}\_merged\_sorted\_primary.bam  
code/cigar\_processing.py  
gene\_position/{species}/combined/{species}\_IGH\_pos.sorted.bed  
gene\_position/{species}/combined/{species}\_IGK\_pos.sorted.bed  
gene\_position/{species}/combined/{species}\_IGL\_pos.sorted.bed

output →

errorStats/{species}/IGH.txt  
errorStats/{species}/IGK.txt  
errorStats/{species}/IGL.txt  
errorStats/{species}/nonIG.txt



all

↔ input

errorStats/mCanLor1/IGH.txt  
errorStats/mCanLor1/IGK.txt  
errorStats/mCanLor1/IGL.txt  
errorStats/mCanLor1/nonIG.txt