Reference

Tumor BAM

Normal BAM

1: run_strelka

`/strelka/strelka_out`

Strelka 1

configureStrelkaWorkflow.pl

- all.somatic.indels.vcf
- all.somatic.snvs.vcf
- **passed.somatic.indels.vcf**
- **passed.somatic.snvs.vcf**

Strelka 2

ConfigureStrelkaSomaticWorkflow.pl

- somatic.indels.vcf.gz
- **somatic.snvs.vcf.gz**
- somatic.indels.vcf.gz.tbi
- somatic.snvs.vcf.gz.tbi

3: parse_strelka

`/strelka/filter_out`

DbSNP DB - COSMIC

dbsnp_filter.pl

strelka_dbsnp_filter.snv.input

- **strelka.somatic.snv.all.gvip.dbsnp_pass.vcf**
- strelka.somatic.snv.all.gvip.dbsnp_present.vcf

strelka.ini
isSkipDepthFilters = 1
maxInputDepth = 10000
depthFilterMultiple = 3.0
snvMaxFilteredBasecallFrac = 0.4
snvMaxSpanningDeletionFrac = 0.75
indelMaxRefRepeat = 8
indelMaxWindowFilteredBasecallFrac = 0.3
indelMaxIntHpolLength = 14
ssnvPrior = 0.000001
sindelPrior = 0.000001
ssnvNoise = 0.0000005
sindelNoise = 0.000001
ssnvNoiseStrandBiasFrac = 0.5
minTier1Mapq = 20
minTier2Mapq = 5
ssnvQuality_LowerBound = 15
sindelQuality_LowerBound = 30
isWriteRealignedBam = 0
binSize = 25000000
is_exome = true / false

pindel-centromere-exclude.bed — Reference — Tumor BAM — Normal BAM

5: run_pindel

`/pindel/pindel_out`

-T 4 -m 6 -w 1 → pindel ← *sample_name.config*

SAMPLE_BP
SAMPLE_CloseEndMapped
SAMPLE_D
SAMPLE_INT_final
SAMPLE_INV

SAMPLE_LI
SAMPLE_RP
SAMPLE_SI
SAMPLE_TD

These are deleted unless
`--no_delete_temp 1`

grep ChrID

pindel-raw.dat

7: parse_pindel

`/pindel/filter_out`

pindel_filter_v0.5.pl

pindel_filter.input

pindel.filter.heterozyg_min_var_allele_freq = 0.2
pindel.filter.homozyg_min_var_allele_freq = 0.8
pindel.filter.mode = somatic
pindel.filter.apply_filter = true
pindel.filter.somatic.min_coverages = 10
pindel.filter.somatic.min_var_allele_freq = 0.10
pindel.filter.somatic.require_balanced_reads = \"true\"
pindel.filter.somatic.remove_complex_indels = \"true\"
pindel.filter.somatic.max_num_homopolymer_repeat_units = 6
pindel.filter.somatic.zero_variant_support = 0.01

pindel-raw.CvgVafStrand_pass
pindel-raw.CvgVafStrand_pass.vcf
pindel-raw.CvgVafStrand_fail
pindel-raw.CvgVafStrand_pass.Homopolymer_pass.vcf
pindel-raw.CvgVafStrand_pass.Homopolymer_fail.vcf

These are deleted unless
`--no_delete_temp 1`

pindel_dbsnp_filter.indel.input → dbsnp_filter.pl ← DbSNP DB - COSMIC

pindel.out.current_final.dbsnp_pass.vcf
pindel.out.current_final.dbsnp_pass.vcf.idx
pindel.out.current_final.dbsnp_present.vcf