

Human Whole Genome Sequencing Service

Informatics Pipeline Release Notes

Version 4.0.2

- 1. Internal workflow changes to automatic quality control outputs.
- 2. Stability updates.

Version 4.0.0

NEW FEATURES:

- 3. Upgraded Isaac to version iSAAC-SAAC00776.15.01.27
- 4. Isaac
 - Additional alignment attempted on reads. Now comparable to bwa-mem
- 5. Upgraded SV calling algorithm to Manta manta-0.23.1.
- 6. Upgraded CNV calling algorithm to Canvas 1.1.0.5.
- 7. Updated IsaacVariantCaller to 2.1.4.2
- **8.** Updated the annotation pipeline and annotation sources.

Version 3.0.0

- 1. Upgraded Isaac to version iSAAC-01.14.02.06
- 2. Removed GATK indel realignment.
 - Now performed by Isaac inline.
- 3. Upgraded SV calling algorithm from Grouper to Manta manta-0.18.1.
- **4.** Upgraded CNV calling algorithm from CNVseg to Canvas 1.1.0.1.
- 5. Changes to PDF report.
 - Now counts all alternative alleles as separate events.
 - Removed outer SNV gene name track from circos plot.
 - SV counts, in the absence of another calculated value, defaults to 0 counts.
 - Only counts passing statistics.
- 6. Changed annotation.
 - Now using RefSeg as annotation base.
 - Upgraded to Ensembl version 72.
 - Dropped HGMD annotation.
 - Added ClinVar annotation.

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Version 2.0.2

1. Internal pipeline changes for improved stability and quality control. No changes to output.

Version 2.0.11

- 1. Modifications to the PDF report.
 - Auto scale the coverage plot for deep sequencing projects.
- 2. Modification to annotation pipe to:
 - Remove source entries.
 - Alter order of vep CSQ filtering for tri-allelic corner cases.
- 3. Updated to VEP 2.7.



Version 2.0.1

- 1. Workflow change to include reporting of non-pass variants for SNPs and indels.
- 2. Minor graphical changes to summaryreport.pdf output.

Version 2.0.0

- 1. Initial Post-Casava release.
- 2. Changed Aligner from Eland to Isaac iSAAC-01.13.04.29.
- 3. Significant changes to VCF file structure.
- 4. Reworked PASS/FAIL VCF filtering parameters.
- 5. Added PDF report.