FoundationONE® Analysis Platform + AVENIO Connect Software

Secondary analysis and workflow manager software

Sample ID	Test name	Sample type	Flags	Modified date/time +	
FMIa20_0092	AVENIO Tumor Tissue CSP kit-1.0.0	Tissue		03-Aug-2021 10:35 PM	>
FM3a20_0094	AVENID Tumor Tissue CGP kit-1.0.0	Tissue		03 Aug 2021 10:35 PM	>
FMIa20_0093	AVENIO Tumor Tissue DSP kit-1.0.0	Tasse		03-Aug-2021 10:35 PM	>
FMIa20_0090	AVENID Tumor Tissue COP kit-1.0.0	Tissue		03 Aug 2021 10:35 PM	>
FMIa20,0095	AVENIO Tumor Tissue CGP kit-1.0.0	Tasue		03 Aug 2021 10:35 PM	>
FMIa20_0097	AVENIO Tumor Tissue COP kit-1.0.0	Tissue		03-Aug-2021 10:35 PM	>
FMIe20_0091	AVENIO Tumor Tissue COP kit-1.0.0	Tissue		03 Aug 2021 10:35 PM	>
FMIa20,0096	AVENIO Tumor Tissue CGP kit-1.0.0	Tasue		03 Aug 2021 10:35 PM	>
PRCC01_FM_7	AVENIO Tumor Tissue CGP kit-1.0.0	Tissue		03-Aug-2021 10:15 PM	>
PRODUJINUZ	AVENIO Tumor Tissue CGP kit-1.0.0	Tissue		03 Aug 2021 10:15 PM	>
PRCC01_FM_1	AVENIO Tumor Tissue CGP kit-1.0.0	Tissue		03-Aug-2021 10:15 PM	>
PRCC01_FM_8	AVENIO Tumor Tissue COP kit-1.0.0	Tissue		03-Aug-2021 10:15 PM	>
PRCC01_FML6	AVENIO Tumor Tissue CGP kit-1.0.0	Tasue		03 Aug 2021 10:15 PM	>
PRCOLUM_S	AVENIO Tumor Tissue CGP kit-1.0.0	Tissue		03-Aug-2021 10:15 PM	>
PRC01_PML3	AVENIO Tumor Tissue COP kit-1.0.0	Tissue		03-Aug-2021 10:15 PM	>
PRCC01_FML4	AVENIO Tumor Tissue CGP kit-1.0.0	Tasue		03-Aug-2021 10:15 PM	>





Evidence-driven variant calling knowledgebase

- Built on insights from FMI's experience in profiling over 500,000+ samples.
- Continuously evolving based on evidence compiled by a multidisciplinary team of cancer biologists from scientific publications, conferences, and online databases (COSMIC, dbSNP, gnomAD, 1000 Genomes).



Broad genomic coverage

- Identifies all four types of genetic variants including Single Nucleotide Variants, InDels, Copy Number Alterations, and Rearrangements.
- Calculates genomic signatures such as TMB, MSI, and LOH.
- Variant calls in all captured regions, not limited to pre-defined set of hotspots.



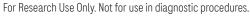
Cloud-based computing for efficient analysis

- Converts uploaded BCL files to FASTQ, demultiplexes reads, and downsamples.*
- Enables regular updates to minimize downtime and manual intervention.
- Allows for seamless hardware integration.



Confidence in high-quality results

• QC metrics, including median coverage and potential contamination, used to assess data quality.



* BCL files are the raw data files generated by the Illumina sequencers. FASTQ format is a text- based format for storing both a biological sequence and its corresponding quality scores.





Gain access to clear information and results

Web application for download of analysis output files

- VCF (SNVs and InDels)
- JSON (CNAs, rearrangements, TMB, MSI, and LOH)
- CSV (QC metrics & variants combined)
- BAM (alignment file)

Details Workflow	Results QC metrics					:
Prin Pla Clus	Completed Readout her plate type te B ster density 383011	Primer well position C1 Percent of cluster pass 87.91662	sing filter	Blart date/lime 21-Nov-2020 04:46 PM PST	End date/time 21-Nov-2020 04;	40 PM PST
Sample details: 8 sa Flow cell ID: H3KH Sample ID		Primer plate type	Primer well position	Status	Comments	RND2133152579 Analysis
FMIa20_0091	AVENIO Tumor Tissue CG		B1	Completed	Add a comment	Run status Completed
FMIa20_0097	AVENIO Tumor Tissue CG	Plate B	A2	Completed	Add a comment	Start date/time 03-Aug-2021 04:00 PM PST
FMIa20_0095	AVENIO Tumor Tissue CG	Plate B	F1	Completed	Add a comment	End date/time 03-Aug-2021 10:33 PM PST
FMIa20_0096	AVENIO Tumor Tissue CG	Plate B	G1	Completed	Add a comment	Analysis version 0.9
FMIa20_0092	AVENIO Tumor Tissue CG	Plate B	C1	Completed	Add a comment	User name -
FMIa20_0093	AVENIO Tumor Tissue CG	Plate B	D1	Completed	Add a comment	Output files
FMIa20_0094	AVENIO Tumor Tissue CG	Plate B	E1	Completed	Add a comment	Downloads as one zip file
FMIa20_0090	AVENIO Tumor Tissue CG	Plate B	A1	Completed	Add a comment	Comments Add a comment
						FoundationOne_Analysis_Platform®

For Research Use Only. Not for use in diagnostic procedures.

SNV, single nucleotide variant. InDel, Insertion and deletion. CNA, copy number alteration. TMB, tumor mutational burden. MSI, Microsatellite instability. LOH, Loss of heterozygosity. QC, Quality control.

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For more information on FoundationONE® Analysis Platform and AVENIO Connect Software please reach out to your local Roche representative.