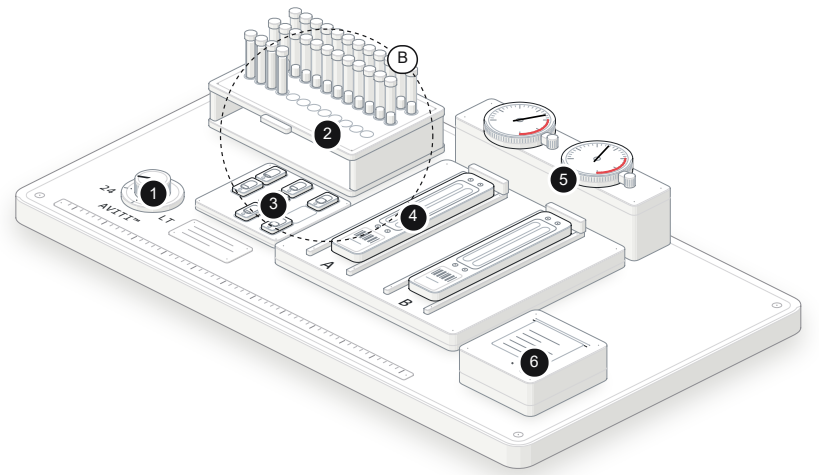
AVITI™ Run Planner



Will my panels fit the run?

Genique Lifesciences' AVITI™ Run Planner works out whether your panels fit a sequencing run. Choose the instrument, add your panels, choose kits and flow cells, and it shows how full each flow cell is and what the run costs at your own prices.

450 Gb
A FLOW CELL, AVITI24™ HIGH OUTPUT 2 X 150

64 %
FLOW A WITH 24 CLINICAL EXOMES

153 %
WITH FOUR WHOLE GENOMES ADDED

89 %
FLOW A ONCE FLOW B IS ON

PARTS

01 **Instrument selector**
Sets AVITI24™, AVITI™ or AVITI LT™, and with it the flow cells you can load.

02 **Tube rack**
Each panel's tubes stand together, one per sample, filled to its Gb per sample.

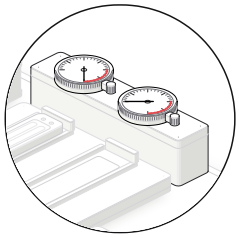
03 **Kit tray**
The eight kits, each a flow cell with its reagents; the chosen one's slot is empty.

04 **Flow cells A and B**
One kit each; turn on Flow B to divide the panels between two.

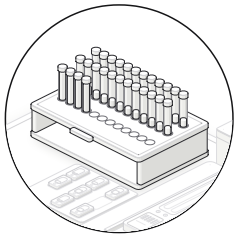
05 **Gauges**
How full each flow cell is; past 100% the run does not fit.

06 **Run plan**
Lists the kits, the loading and the cost, ready to send to us.

CLOSE-UPS

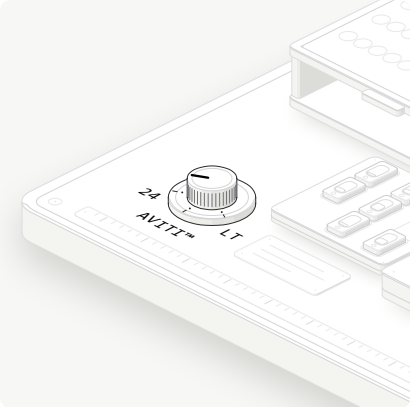


(A) **Over capacity**
The band past 100% is where a flow cell is asked for more than it holds.



(B) **Samples to Gb**
Exome tubes filled to 12 Gb, genome tubes to 100 Gb.

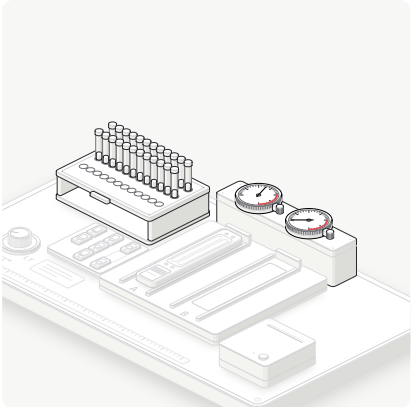
How it works



01

Choose your instrument

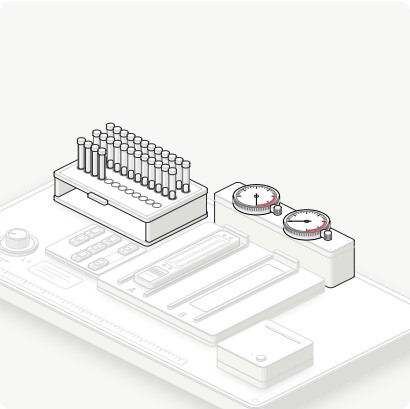
The knob sets AVITI LT™, AVITI™ or AVITI24™, and with it the flow cells (the glass slides the sequencer reads) you can load: one on AVITI LT™, up to 150 Gb, so bay B stays shut; two on AVITI24™, up to 450 Gb each.



02

Add your panels

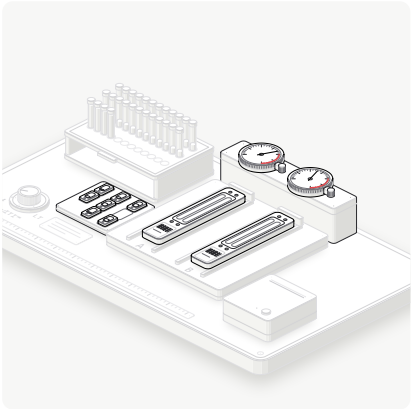
Each panel's tubes stand together, one per sample, filled to its Gb per sample (billions of DNA letters read). 24 Clinical exomes at 12 Gb fill Flow A to 64%.



03

Past 100%

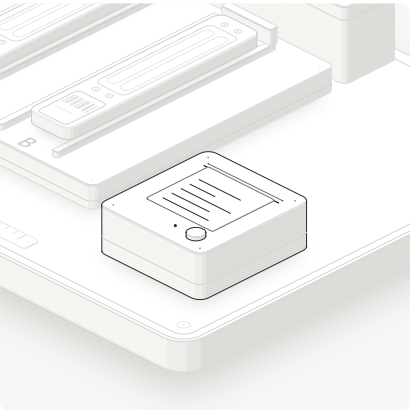
Four whole genomes at 100 Gb more take Flow A to 153%, over capacity by 238 Gb. The run does not fit in one go.



04

Turn on Flow B

The planner divides the panels between the two flow cells: the genomes on Flow A at 89%, the exomes on Flow B at 64%, in one 38 h run.



05

Download the run plan

The run plan lists the kits, the loading and the cost, ready to send to us. Enter your own prices under Costs to see the cost per sample.

WHY TWO BUDGETS?

A flow cell runs out of output in Gb or of polonies (the clusters each read comes from), whichever comes first. The planner checks both, so each gauge shows the one that binds. Past 100% the run does not fit in one go.

SPECIFICATION

Instrument	AVITI24™	Panels	24 Clinical exome at 12 Gb, 4 Whole genome at 100 Gb
Kit	High Output 2 x 150	Run	Two flow cells, one 38 h run
Flow cell	450 Gb, 1,500M polonies		