Workflow: TapeStation – Genomic center

1. Random
2. samples preparation
3. TapeStation
4. Software

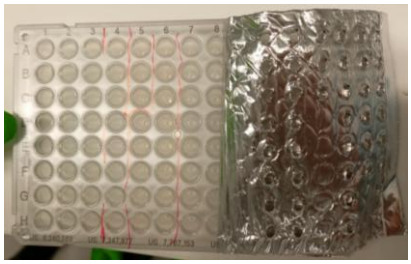
Random: preparation before start

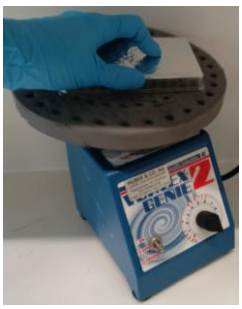
Quibit + Q. Eppendorf on the shelf

Workflow: sample preparation

High sensitivity Sample Buffer and High Sensitivity D1000 screenTape

Plate





vortex
for while

spin – don't forget balance

just random, I did (30s; 1000 rcf)

Strips

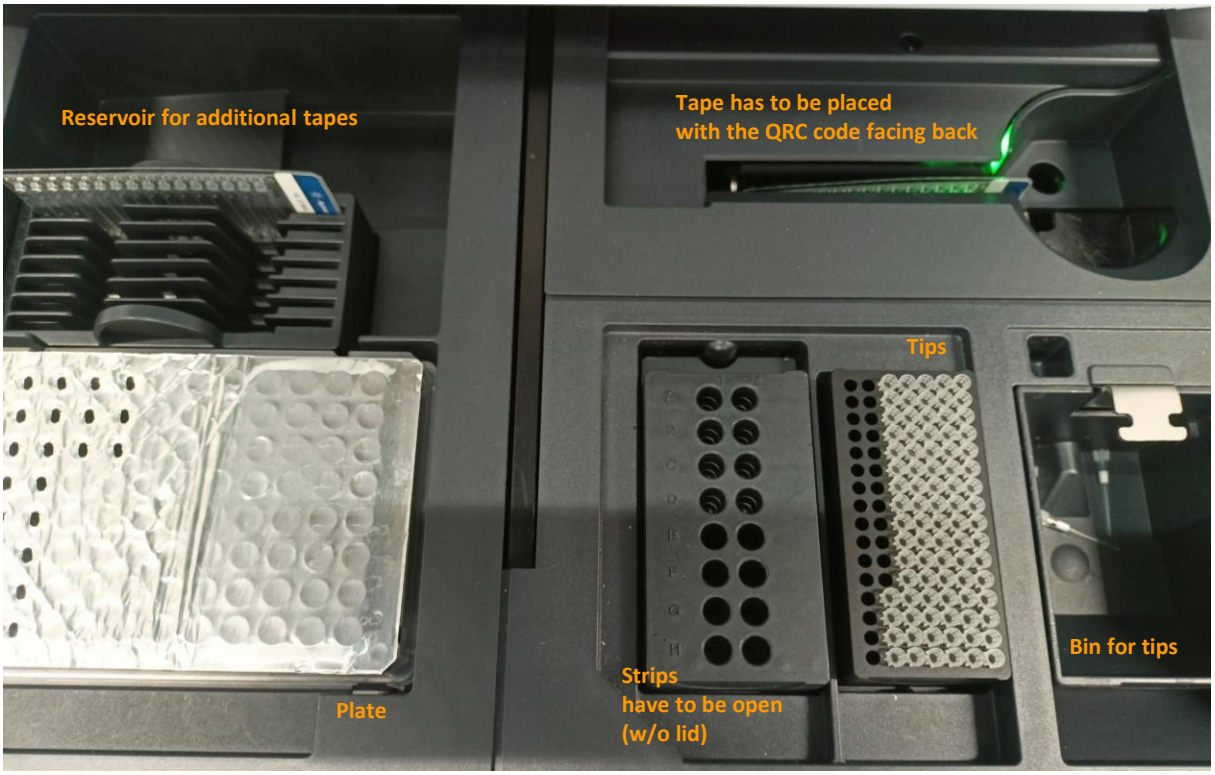
vortex on bench next to PC
sometimes already set to 1 min

spin down
on the desk centrifuge

Workflow: TapeStation

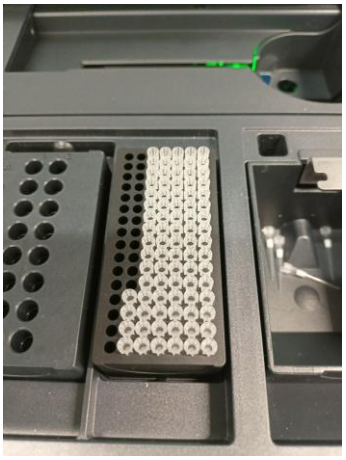
High Sensitivity D1000 screenTape

- has to be placed with the QRC code facing back
- can be partially use (it is visible) – TapeStation will automatically read
- if needed more Tapes – place in reservoir – will be automatically replaced



Tips

- not necessary to use full box
  just find some around with sufficient amount

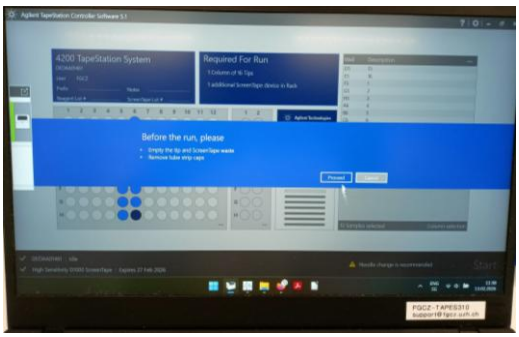


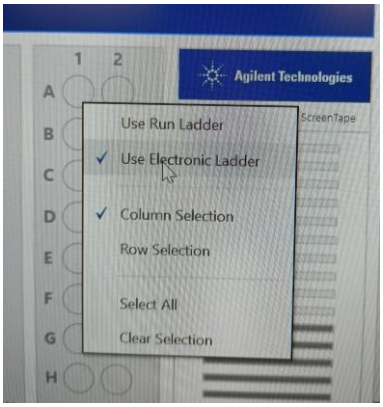
After measurement

- empty bin with tips and keep/trash tape

Workflow: Software

Warning before run!





Position A1 is always for ladder

- right click A1
- select “Use Electronic Ladder!

- the analysis software requires the Ladder

Select position of samples
and
name the samples (Well and Description

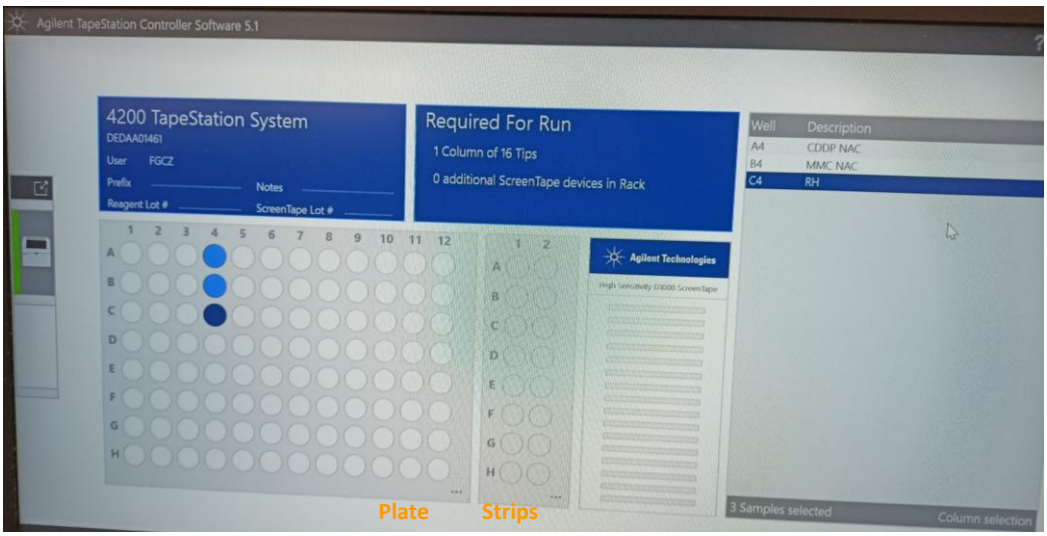
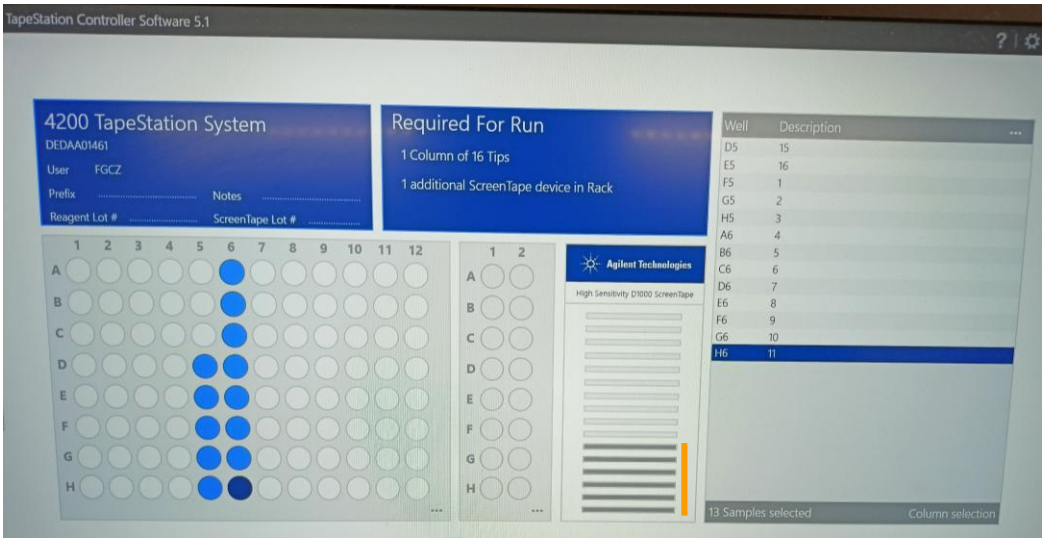


Plate Strips



These columns were already used

Images taken from elsewhere only for illustration

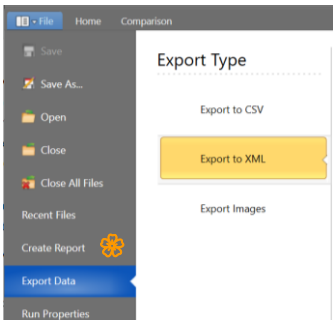
Workflow: Software

Genomic center UZH
- create your folder on the descope

Comparison (bar up; the last option)
- select samples (only click)
- save comparison file (upper bar, last icon)

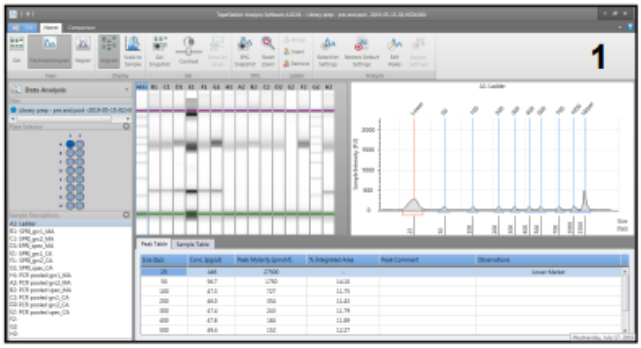
Home
- to see the runs
- select Regions
  - Click Region
  - Region Settings
  - Select region: define range (100 – 1000)
  - Note: for R-loop Cut & Tag should be 180 – 600 bp, up to 800 bp)

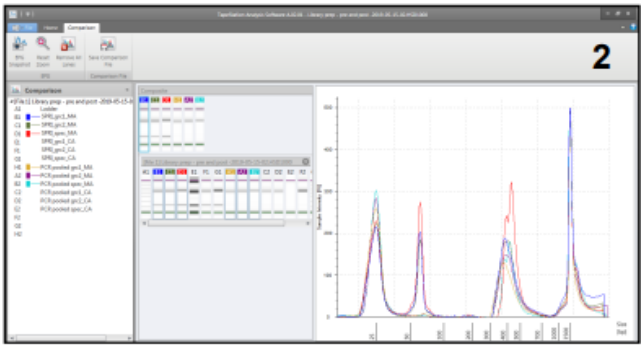
File
- Export data
  - CSV (excel)
    - Sample table: concentrations
    - Peak table: all peaks
    - Region table

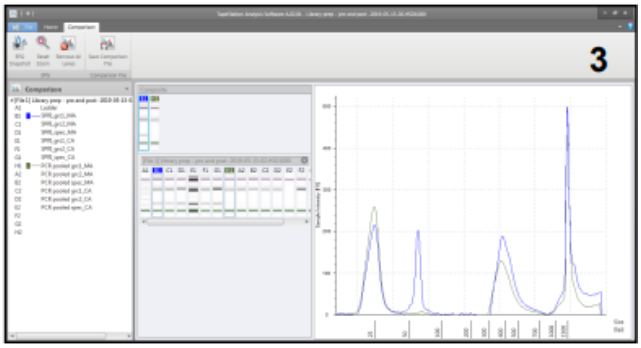


- Create Report

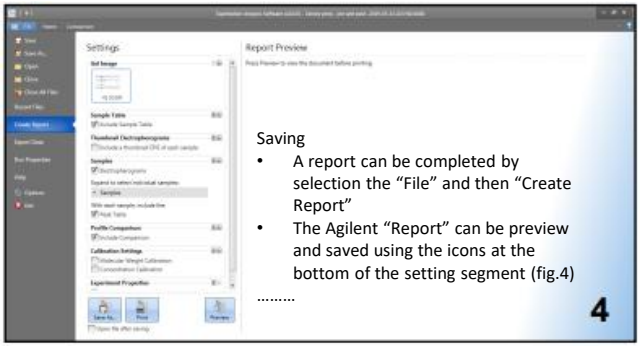
Source (link on the website, bellow): Agilent TapeStation; https://www.malariagen.net/wp-content/uploads/2023/10/GbS04_Agilent_TapeStation.pdf





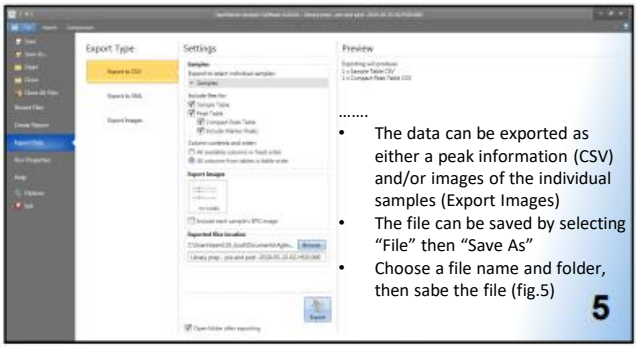


Comparison software
- will open once the run is complete (fig.1)
- for comparison select the comparison tab (fig.2)
- specific samples can be compared by selscting and de-selecting sample within the comparison window (fig.2&3)
- save: by selecting “Save Comparison File” ….



Saving
- A report can be completed by selection the “File” and then “Create Report”
- The Agilent “Report” can be preview and saved using the icons at the bottom of the setting segment (fig.4)

……..



……..
- The data can be exported as either a peak information (CSV) and/or images of the individual samples (Export Images)
- The file can be saved by selecting “File” then “Save As”
- Choose a file name and folder, then sabe the file (fig.5)