

# Sample Submission Guidelines

## General guidelines:

- send an excel file with the current list of samples and their concentration electronically, plus attach the printed list to the package
- try to avoid complex multi-word names (Leukemic B cells MU1630 2118) or just numerical order (1, 2, etc.) written on the tubes
- samples are preferred to be delivered in 1.5 ml tubes or PCR plates (definitely not in individual PCR tubes)
- if you have already performed any quality control (eg for ELFO, Bioanalyzer, Fragment Analyzer), please also provide us with reports
- if you don't have access to our [reservation system](https://booking.ceitec.cz/) (<https://booking.ceitec.cz/>), please, [register](#)
- if you have access to our [reservation system](#), you are expected to create a service ticket and upload all the mentioned documents to it
- if the data analysis is to take place in the partner CF Bioinformatics, send also a file with a more detailed description of the analysis, the origin of the samples, their division into groups (conditions), etc.

## RNA/DNA for QC

- 4 ul per sample with known concentration
- 8 ul per sample with unknown concentration

## RNA for library prep:

- the optimal amount of total RNA is 100 ng/ul in 20 ul
- the minimum amount is 500 ng
- samples should be sent in a sufficient amount of dry ice
- samples should be intact with RIN not lower than 7.0 and free of gDNA contamination (DNase treated)
- samples should be free of contaminants with 260:280 ratio > 2 and 260:230 ratio >1.7

## DNA for library prep:

- the optimal amount of gDNA is 50 ng/ul in 20 ul for PCR libraries and 30 ul for PCR-free libraries
- the minimum amount is 100 ng
- samples should be sent on coolers
- samples should be intact with 260:280 ratio >1.8 and 260:230 ratio >1.7

## Sequencing libraries:

- already pooled libraries are preferred with minimum molarity of 4nM and minimum volume of 15 ul for MiSeq/NextSeq or 100-200 ul for NovaSeq (depending on the type of flow cell)

- samples should be sent on coolers
- the sheet containing the sample names and their index sequences must be filled out on our website <http://cfb.ceitec.muni.cz/sequia/> - if you don't have access yet, a registration link will be sent to you. The sample name must not contain any characters other than numbers, letters, underscores (\_) and dashes (-) (i.e. no spaces are allowed)