



SARS-CoV-2 sample preparation guidelines

RNA for detection of SARS-CoV-2

General indications for RNA submission

To obtain high-quality sequencing data, customers must provide a good quality RNA, in detail:

- RNA samples can be extracted from viral cultures and/or swabs from a variety of upper and lower respiratory sources, including throat, nasal, nasopharyngeal, sputum, and bronchoalveolar lavage fluid (BALF);
- since suitable viral sequence coverage can be achieved $Ct < 25$, report of RT-PCR assays, indicating the relative Ct value for each sample, is highly recommended;
- The minimum volume requested is 50 μ L;
- the 260/280 ratio of your RNA sample should be >1.8 ;
- samples should be resuspended in nuclease-free water;
- RNA samples must be free of contaminating proteins and other cellular material, organic solvents (including phenol and ethanol) and salts. We strongly recommend commercial kits for Total RNA for NGS library preparation. Otherwise, if using an RNA isolation method based on organic solvents, we recommend column purification after isolation.

High-quality sequencing data and complete viral genome coverage is strictly dependent on specimen's viral load (usually the Ct value is indicative), and not a priori predictable.

Send RNA samples in 1.5-2ml Eppendorf tubes sealed with parafilm (**0.2 mL and 0.5mL tubes, as well as strip tubes, WILL BE NOT ACCEPTED**). If you have 24 samples or more, please put your samples in a 96-wells skirted plate (MANDATORY). Do not ship plates without secondary containment as these may crack when placed directly on dry ice.



The tubes must have, on the vial top, a clear and permanent sign (or a thin label) with the progressive number of the shipped samples in accordance with the LABEL_ID in the **Samples Spreadsheet**. Send RNA samples in dry-ice or lyophilized with RNAsable (Biomatrica).

*Please, do not forget to send us the compiled **Samples Spreadsheet**, both with the shipped parcel and via e-mail. In order to be able to properly track and safeguard your samples we also ask you to send us the **Tracking Number** via e-mail.*
