















Sample type recommendation for SARS-CoV-2 testing

The Covid-19 pandemic has led to an unprecedented increase in the reagents and consumables required for the extraction and molecular detection of SARS-CoV-2 RNA. In order to alleviate potential shortage of those critical reagents, we have investigated alternative approaches for sample preparation to bypass those requirements.

We have designed and developed a new method allowing the direct detection of SARS-CoV-2 RNA from heat-treated respiratory samples. Following a very extensive optimisation and thorough validation, we found that the heat treatment method allowed a sensitivity similar to the sensitivity obtained using our standard SARS-CoV-2 detection protocol with nucleic acid extraction (96.2% agreement, see <https://pubmed.ncbi.nlm.nih.gov/33063824/>).

This new method allows much faster sample processing (improved turnaround time) but since it does not include any nucleic acid extraction step, some sample types that may contain PCR inhibitors (eg NPA, sputum, virus inactivation buffers...) are not compatible with this procedure. A list of approved and not suitable swab samples is shown below. Incompatible samples are still processed using our conventional protocol (nucleic acid extraction/RT-PCR detection). Please contact us if you have any question regarding accepted sample types.

APPROVED	Manufacturer	Resuspension Medium
	RETEL	M4-RT VTM (for viruses and chlamydia)
	COPAN	UTM-RT (for viruses and chlamydia, Mycoplasma & Ureaplasma)
	Cepheid	VTM
	MWE	Σ-Virocult (for viruses and chlamydia, Mycoplasma & Ureaplasma)
	NEST	Solution for swab samples collection, transportation and storage
	SANLI MEDICAL	Disposable virus specimen collection tube
	Any dry swab: COPAN, BD, MWE, Puritan...	0.1% Igepal (in-house)

NOT SUITABLE	Manufacturer	Resuspension Medium
	MAN TACC 2mL tube	UTM *transparent liquid in a white capped swab tube
	eNAT™	Specimen Collection and Transport Device Optimized for Molecular Assays
	PrimeStore MTM Longhorn Vaccines and Diagnostics	Molecular Transport Medium (1.5mL)
	CW BIO	Virus inactivation and preservation medium
	HIMEDIA	COVIDSafe™ virus inactivation medium