



PRACTICAL INNOVATION



Coronavirus (COVID-19) Sample Tracking Packages

To satisfy the huge global demand for proven technological solutions to assist labs involved with the essential RT-PCR assay part of the “test, trace and isolate” strategy for dealing with pandemic SARS-CoV-2 virus – Ziath has introduced two optimized packages for reliable tracking of patient samples submitted for Coronavirus testing.

Package A: For Large Scale High-Density Testing

If you are planning to use standard laboratory automation to process large numbers of samples, then the SLAS/ANSI 96-position format is the best option. The advantage is that most commercially available instruments designed for microplate or tube rack handling will accept the SLAS/SBS 96 position format. So, your samples can be in 96 tube racks and easily transferred to 96 well PCR plates, or even to high-density 384-well PCR plates which will increase your throughput. The liquid handling needed for clean-up and extraction of RNA from patient samples can be done on robots with 4, 8 or 96 well pick up & dispense heads; or multi-channel pipettes of 4 or 8 channels can be used in manual mode. To keep track of the tubes, whole-rack 2D bar code scanners can be used from a number of manufacturers including Ziath. In addition, Ziath can supply a 96 position tube selector, the Mohawk, which can automatically pop up tubes from within the rack as they are required, greatly simplifying retrieval and ensuring accurate tube selection under software control. With the co-ordination of Ziath’s Samples software, the rack scanner and picker can work seamlessly to provide verification of original tube position in a rack and the location of any picked tube in a daughter or destination rack, updating the database with both pieces of information in real time.



The disadvantage of using the SLAS/SBS format is that the sample tubes in the racks are necessarily smaller in diameter than some tubes that could be used as an alternative. The pitch, or spacing, of 96 locations in these racks is 9mm, so the tube diameter is typically 7mm maximum. This may restrict the size and type of swab that can be introduced into the tube carrying the patient’s original mucosal sample.

For large-scale, high-density testing labs - Ziath is offering an attractively priced deal that brings the Mohawk tube selector, Mirage rack scanner and Samples Software together to provide a reliable, high throughput sample-tracking technology bundle.

Request a quote: [click here](#)

Package B – For Larger Sample Swab Testing

If it is desirable to use a larger swab for sample collection, then a larger style of tube will be needed. In this case the best option is the 2D-coded Cryovial. These are available in a large variety of volumes, up to 5ml capacity, and heights, which enable them to accommodate most easily obtainable swabs. The cryotubes are stored, sorted and handled in Cryoboxes. These deep square format plastic boxes can be equipped with holes at the base of each tube location so that the tube barcode can still be read through the base of a filled box. Typical sizes would be 81 or 100 tubes all grouped into roughly the same area of 13 x 13cm. With 9 or 10 tubes along each axis, the cryobox format does not lend itself easily to multi-channel pipette operation but does confer the advantage of a larger internal volume. The screw caps of these vials are also easily removed and the vials are easier to pick from within their racks.



Automation for cryoboxes is less common and not all liquid handling robots can cope with them. Ziath recommends the Cube 2D rack scanner for these as it can accommodate all known formats of cryoboxes from many different manufacturers. In combination with the Samples software, the scanner can quickly and accurately update tube position information in each sample entry, with the scanner being controlled from within the database software.

The Samples software is an ideal inventory management program, for sample libraries up to the hundreds of thousands, that is easy to install and operate. It provides basic "What is it? Where is it?" capability with searchable tracking tags that are entirely customizable by the user.

For labs specializing in testing larger sample swabs - Ziath is offering a competitively priced, bundled package that includes a Cube scanner with cryoprotection, Samples sample tracking software and two cases of 40 cryoracks of either 81 or 100 positions plus sufficient cryotubes to fill these.

[Request a quote: click here](#)

Ziath Ltd

Unit 2A Solopark Trading Estate, Station Road, Pampisford, Cambridge CB22 3HB

Tel: +44 (0) 1223 855021 Email: info@ziath.com www.ziath.com

