

Cavro® ADP a hit with Chinese *in vitro* diagnostic customers

Chinese company DaAn Gene has integrated the Cavro Air Displacement Pipettor (ADP) into its new generation of molecular diagnostic instruments, bringing the advantages of Tecan's liquid pipetting expertise to blood banks and infectious disease laboratories in China.



Decode Genetic Life. Assure Human Health.

DaAn Gene is a major supplier to the Chinese *in vitro* diagnostics (IVD) market, specializing in molecular diagnostic kits and reagents for more than 20 years. In 2005, the company began to design and manufacture instrumentation to support its reagent business and, in 2009, chose to incorporate Tecan Cavro components into its DA3000 DNA extraction system for infectious disease screening in blood banks.

Mr Junan Hong, Research and Development Director for DaAn Gene, explained: "The Tecan name is already well known in hospital laboratories in China, where the Freedom EVO® series is used extensively for liquid handling and sample preparation applications. Tecan Cavro components are renowned for offering high reliability and high performance, and it made sense for us to choose the Cavro ADP pipetting solution and Cavro XLP syringe pump for our instruments."

In the last year or so, Chinese laboratories have begun to turn to DNA extraction and PCR for infectious disease testing in blood banks, moving on from the more traditional ELISA techniques. Where most suppliers in the Chinese market use liquid displacement techniques in their liquid handling solutions, DaAn Gene is leading the way with the use of air displacement technology in the context of an IVD instrument. The Cavro ADP is a compact, fully programmable, pneumatic pipetting solution that is easy to integrate

into instruments, giving exceptional liquid handling performance from 1-1,000 µl. It uses air displacement to aspirate and dispense fluids, requiring minimal maintenance, and correct operation is monitored by on-board, pressure-based liquid level detection. A built-in tip sensor checks if a disposable tip has not been correctly picked up, or has fallen off the probe, flagging and logging errors to increase process security. The DA3000 is unique in that it features four ADP modules running in parallel, dramatically increasing the throughput of the instrument and resulting in a very competitive product for DaAn Gene to release to the Chinese market.

Mr Hong continued: "We are very happy with the excellent product performance and quality, plus the strong support we have received, both from the local Tecan team in China and application specialists in the US. These components are the right products for this application in blood banks and infectious disease control centers. We are already developing other instruments to suit different workloads and, where the DA3000's four ADP pipettors deal with high



Automation is crucial for high throughput blood banks



The Cavro ADP is ideally suited to DaAn Gene's needs, offering exceptional liquid handling performance and requiring minimal maintenance

throughput applications, we aim to produce similar options with fewer ADP modules for low to medium throughput facilities."

To learn more about DaAn Gene, go to daan.joomcn.com

To find out more about the Tecan Cavro range of OEM components, visit www.tecan.com/components



Cavro Air Displacement Pipettor