

COMPATIBILITY OF BODE DNA COLLECTION PRODUCTS WITH THE INTEGENX RAPIDHIT ID INSTRUMENT

Jamia Mealy MFS, Kristen Naughton BS, Dan Watsula MS, and Robert Bever PhD
Bode Cellmark Forensics, Inc.

Rapid DNA describes the fully automated hands-free process of developing a CODIS Core Loci STR profile from a reference sample. Rapid DNA instruments are designed specifically for use by law enforcement in non-laboratory environments such as booking stations. This “swab in – profile out” technique provides results in just 90 minutes, presenting law enforcement with immediate information to aid in investigative leads.

The IntegenX RapidHIT ID sample cartridge is designed to easily accommodate swab shaped collection devices. Bode validated the IntegenX instrument for DNA analysis using multiple collection devices including those that are swab shaped (Standard cotton swab, Bode SecurSwab 2 and Bode SecurSwab DUO-V) and non-swab shaped (Bode Buccal DNA Collector (BDC) and Bode Buccal 2 (BB2)). As part of the validation study, four Bode DNA Collection products were used to collect buccal samples from five donors. All samples collected with Bode DNA collection products and processed with the IntegenX instrument produced DNA profiles that were concordant with traditional DNA analysis methods.

The swab portion of the SecurSwab 2 and DUO-V can be easily removed from the collection device and inserted into the RapidHIT sample cartridge. A sampling method was developed to process DNA collected on non-swab samples – i.e. BDC and BB2. This sampling method proved to provide reliable and consistent results.

These results indicate that Bode DNA Collection Products are compatible with the IntegenX RapidHIT System and the generated profiles were concordant with those produced by traditional laboratory methods. The Bode SecurSwab DUO-V and Bode Buccal DNA Collectors (BDC and BB2) are unique because they allow for archiving of the same collector used to process the RapidHIT DNA profile. The use of these collection products can provide both rapid answers (90 minutes) and the ability for traditional hit confirmation sample processing.