



iSWAB Direct PCR or RT-PCR Protocol (No Extraction Required)

The proprietary iSWAB buffer is a unique formulation that not only stabilizes the samples at the point of collection, but performs a gentle lysis which slowly releases DNA from the cells into the buffer over a period of several hours. This feature enables the mixture to be used in a direct-to-PCR application, in which the extraction step is skipped entirely. The benefits of this application are:

- Time, cost, and labor savings by eliminating extraction reagents and processing time
- Rapid field-based analysis

For more complex downstream applications such as Next Generation Sequencing or microarrays, however, we still recommend performing a standard DNA extraction.

The procedure for preparing iSWAB samples to be used directly in PCR is as follows:

1. Collect buccal sample with iSWAB-DNA or ISWAB-RNA.
2. Incubate the collected iSWAB-DNA or ISWAB-RNA samples at least 3 hrs at room temperature before processing in direct PCR (for ISWAB-DNA) or RT-PCR (for ISWAB-RNA) applications.
3. Centrifuge the collected iSWAB-DNA or ISWAB-RNA sample for 2 minutes at 14000 rpm.
4. Take 1uL of the clarified iSWAB supernatant and dilute in nuclease-free water to 1:8 for (ISWAB-250) and 1:16 for ISWAB-1200.
5. Take 1 or 2 uL (depending on your required sample input for your PCR protocol) from the iSWAB diluted sample and apply to your direct or standard PCR (for ISWAB-DNA) or RT-PCR (for ISWAB-RNA) master mix (mix well with PCR tube contents).
6. Follow your standard PCR or RT-PCR amplification protocol.