

## Saliva DNA Collection, Preservation and Isolation Kit – 50 Individual Devices

Norgen's Saliva DNA Collection, Preservation and Isolation Kit is an all-in-one solution designed for 1) simple and non-invasive saliva collection; 2) preservation of DNA in saliva samples at ambient temperature; 3) safe and convenient shipping; and 4) isolation of high quality DNA within a laboratory setting. The Saliva DNA Collection and Preservation Kit contains 50 Individual Saliva DNA Collection and Preservation Devices, as well as the required reagents for the subsequent laboratory isolation of the saliva DNA from the preserved samples using alcohol precipitation.



Each of the 50 Individualized Saliva DNA Collection and Preservation Devices consists of 3 components: (1) Saliva Collection Funnel and Collection Tube, (2) Collection Tube Cap, and (3) Norgen's Saliva DNA Preservative contained within a sealed squeezable ampoule. Saliva samples are collected by spitting inside the Collection Funnel which has been assembled with the Collection Tube. After collecting the required volume of saliva the Collection Funnel is removed and the contents of the Preservative Ampoule are then added and mixed with the collected saliva. The Saliva Collection Tube is subsequently sent to the laboratory for DNA isolation and analysis. Each of Norgen's Collection Tubes is labeled with a unique serial number that can be used for secure and anonymous tracking of the sample. The saliva DNA in preserved samples is stable for more than 2 years at room temperature. This kit is ideal for collecting, preserving and isolating DNA samples for epidemiological and population studies.

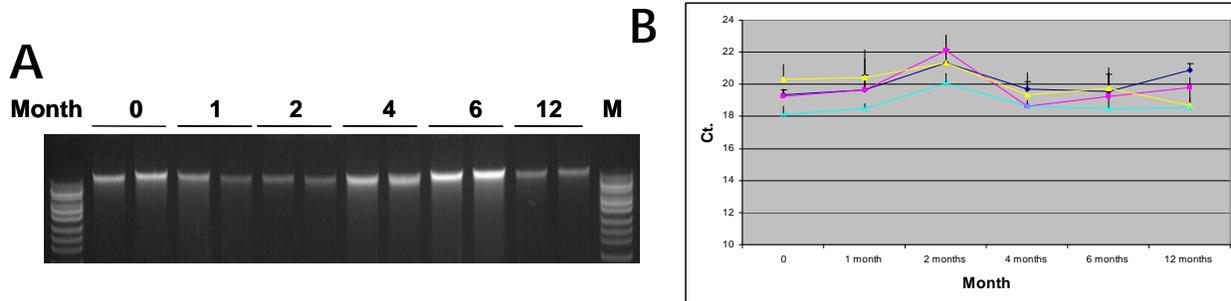
### SALIVA DNA PRESERVATIVE

Norgen's Saliva DNA Preservative is an aqueous storage buffer designed for rapid cellular lysis and subsequent preservation of DNA from fresh specimens. The buffer prevents the growth of Gram-negative and Gram-positive bacteria and fungi, and also inactivates viruses allowing the resulting non-infectious samples to be handled and shipped safely. In addition, the buffer eliminates the need to immediately process or freeze samples and allows the samples to be shipped to centralized testing facilities at ambient temperature. The components of the buffer allow samples to be stored for more than 2 years without any detectable DNA degradation.

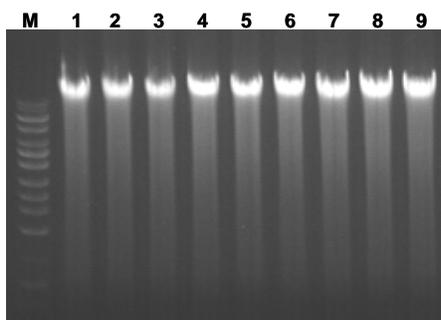
### Saliva DNA Collection, Preservation and Isolation Kit

Non-invasive sample collection	Higher donor compliance and lower cost
Convenient, all-in-one kit	Saliva sample collection, preservation, transportation and DNA isolation all with one convenient, affordable kit
Safe saliva shipping	The provided Saliva DNA Preservation Buffer prevents the growth of Gram-negative and Gram-positive bacteria and fungi, and also inactivates viruses allowing the resulting non-infectious samples to be handled and shipped safely.
DNA is stable for years at room temperature	Saliva DNA preserved with Norgen's Saliva DNA Preservation Buffer is stable for more than 2 years at room temperature.
High quality DNA	Purified DNA is of the highest quality and free from inhibitors, and can be used in sensitive downstream applications including PCR, qPCR, sequencing, SNP analysis, microarrays and Southern Blot Analysis.

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**Figure 1. Stability of DNA in Norgen's Saliva DNA Preservation Buffer.** The main component of Norgen's Saliva DNA Collection, Preservation and Isolation Kit is the Saliva DNA Preservation Buffer. Saliva samples were collected from numerous donors and mixed, and then an equal volume of Norgen's Saliva DNA Preservation Buffer was added to the saliva. Equal aliquots of the preserved DNA saliva samples were stored at -20°C, 4°C, room temperature and 55°C for up to 12 months. Saliva DNA was subsequently isolated at time 0, 1 month, 2 months, 4 months, 6 months and 12 months from 0.5 mL of the saliva/preservative sample using Norgen's Saliva DNA Isolation Kit (Cat# 21410). Panel A shows the DNA isolated from the sample stored at room temperature for up to 1 year. As it can be seen, there is no evidence of DNA degradation after the saliva samples are stored for 1 year at ambient temperatures in the Preservation Buffer. Also the size of the DNA was maintained over 24 kb for the entire 12 month period. The DNA isolated from the saliva samples stored at -20°C, 4°C, room temperature and 55°C at the various time points was also used as the template in a real-time PCR reaction to detect the 5s gene. As it can be seen in Panel B, all the DNA samples were successfully amplified. Furthermore, the quality of the saliva DNA stored at all 4 temperatures did not change from 0 months to 12 months, as indicated by the fact that the Ct value remained consistent. The saliva samples stored at 55°C can allow us to extrapolate results based on accelerated-aging, and therefore the samples stored at 55°C for 12 months show equal stability to saliva preserved for 5 years at room temperature (24°C). Therefore, based on the successful PCR results for samples stored at 55°C shown above, saliva samples stored in Norgen's Saliva DNA Preservation Buffer are stable at room temperature for up to 5 years.



**Figure 2. High Integrity of Saliva DNA.** Saliva samples were collected from 9 donors using Norgen's Saliva DNA Collection, Preservation and Isolation Kit, and the DNA was subsequently isolated using the provided protocol. Ten µL of the purified DNA was run on a 1% agarose TAE gel for visual analysis. All 9 saliva DNA samples were of a high integrity and showed no signs of degradation. Furthermore, the size of the isolated DNA was over 24 kb in all cases, as evidenced by the fact that all samples are over the top band of the DNA ladder used, which is 24 kb (Norgen's UltraRanger 1 kb DNA Ladder, Cat# 12100).

Cat #	Description	Quantity
RU35700	Saliva Collection, Preservation and Isolation Kit - 50 Individual Devices	50 Devices