

Saliva DNA Collection, Preservation and Isolation Kit

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. Isolation of high quality DNA within a laboratory setting.

The Saliva DNA Collection, Preservation and Isolation 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. Each of the 50 Individualized Saliva DNA Collection, Preservation and Isolation Kits 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 5 years at room temperature. This kit is ideal for collecting, preserving and isolating DNA samples for epidemiological and population studies.



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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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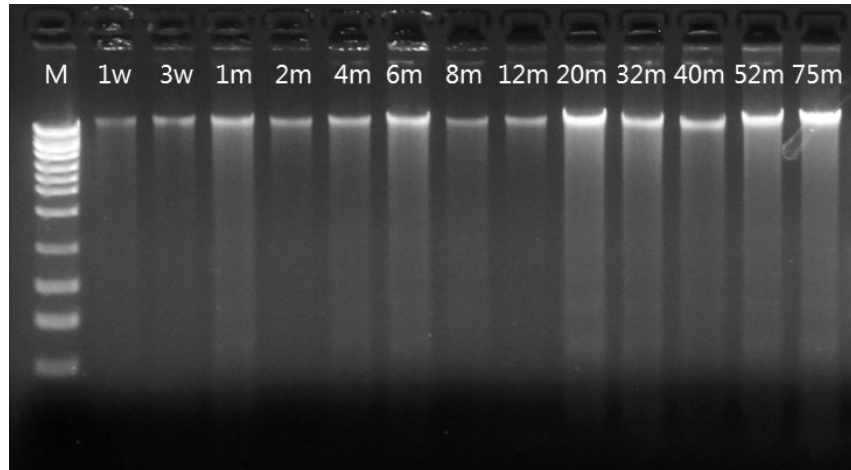


Figure 1. Stability of DNA Preserved in Norgen's Saliva DNA Preservative at Room Temperature for up to 75 Months. Saliva samples were collected from numerous donors and mixed, and then an equal volume of Norgen's Saliva DNA Preservative was added to the saliva. The preserved saliva was then stored at room temperature for up to 75 months. Saliva DNA was subsequently isolated at 1 week, 3 weeks, 1 month, 2 months, 4 months, 6 months, 8 months, 12 months, 20 months, 32 months, 40 months, 52 months and 75 months from 0.5 mL of the saliva/preservative sample using Norgen's Saliva DNA Isolation Kit (Cat. RU45400). For visual analysis, 100 μ L of the purified DNA was run on an agarose TAE gel. As it can be seen, there is no evidence of DNA degradation after the saliva samples are stored for 75 months at ambient temperatures in Norgen's Saliva DNA Preservative. Furthermore, the size of the DNA was maintained over

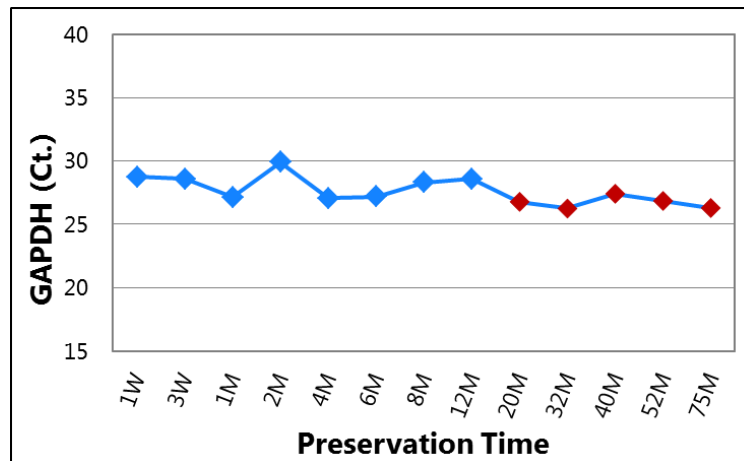


Figure 2. Detection of GAPDH Using Taqman Real-time PCR from the Saliva Samples Stored at Room Temperature from 1 Week Up to 75 Months. The quality of the saliva DNA stored at room temperature did not change from 1 week to 75 months, as indicated by the fact that the Ct values remained consistent. The improvement in the Ct values from the real-time PCR graph (red) also indicate the impact of the improved saliva DNA isolation method provided by the Saliva DNA Isolation Kit (Cat. RU45400).

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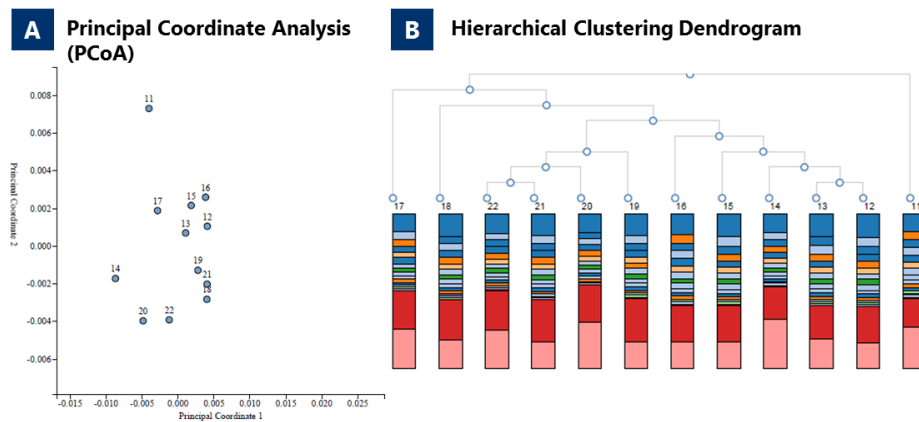


Figure 3. Illumina MiSeq 16s rRNA metagenomics data from saliva samples preserved for over 6 years using Norgen's Saliva DNA Collection and Preservation Devices. The saliva DNA was isolated using Norgen's Saliva DNA Isolation Kit (Cat. RU45400) from saliva that had been preserved for various periods of time up to 6 years at room temperature. A) Principal Coordinate Analysis of 12 saliva microbiomes showing differences in the distribution of taxonomic classifications between samples up to kingdom level. B) Hierarchical clustering of 12 saliva microbiomes based on genus-level classifications, including a bar chart showing the relative abundance of genus-level classifications for each sample in the dendrogram.

Kit Contents:

1. Individual Saliva DNA Collection and Preservation Devices
2. Proteinase K
3. Binding Buffer B
4. Product Insert

Individual Saliva DNA Collection and Preservation Device Contents:

1. Saliva Collection Funnel and Collection Tube
2. Collection Tube Cap
3. Preservative Ampoule
4. Donor Instructions

Customer-Supplied Reagents and Equipment

For DNA Isolation

1. Benchtop microcentrifuge (capable 20,000 x g)
2. 55°C incubator
3. Micropipettors
4. 2 mL microcentrifuge tubes
5. 15 mL centrifuge tube
6. 70% ethanol
7. Isopropanol
8. TE Buffer (10 mM Tris pH 8.0, 1 mM EDTA)

Storage Conditions

The Collection Device should be kept tightly sealed and stored at room temperature for up to 5 years without any reduction in kit performance. The kit contains ready-to-use Proteinase K which is dissolved in a specially prepared storage buffer. The Proteinase K should be stored at -20°C up to the expiry date indicated on the label. Store all other kit components at room temperature. The Collection Tube, the Collection Funnel and the Device Container of each Individual Saliva DNA Collection and Preservation Device are recyclable.

Cat #	Description	Quantity
RU35700	Saliva DNA Collection, Preservation and Isolation Kit	50 devices