

GeneFix Real-Time In use Stability Study over 64 Months at Ambient Temperatures

Method:

GeneFix GFX-02 2ml saliva samples were collected from multiple donors, with an equal volume saliva added to stabilisation buffer (collected January 2016). Samples were vortexed to mix and stored at ambient temperature (23°C ± 5°C) until isolation and analysis.

After 16 months. 1ml was removed for DNA isolation using the GeneFix Saliva-Prep GSPN kit, following the kit protocol. Purified samples were analysed for yield, purity, and DNA integrity by Qubit dsDNA BR Assay, Nanodrop assay, and 1.0% Agarose gel, respectively.

After 64 months this was repeated, using another set of 1ml aliquots taken from the donated samples. Once analysed these samples were compared and contrasted with the 16 month samples to evaluate sample stability at ambient temperature.

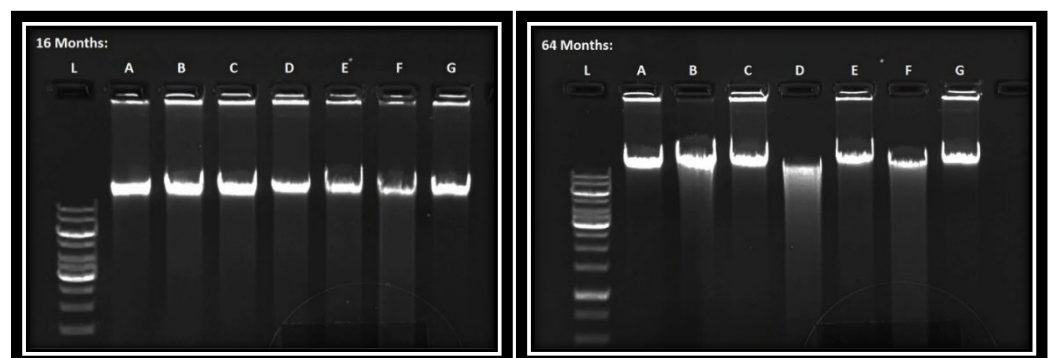
Results:

Table 1: Sample yield and purity data analysed via Qubit and Nanodrop.

Sample ID	16 Months		64 Months	
	DNA Yield (ng/μl)	260/280	DNA Yield (ng/μl)	260/280
Sample A	44.7	1.80	49.8	1.87
Sample B	181.0	1.79	187.0	1.85
Sample C	103.0	1.83	90.7	1.88
Sample D	88.0	1.69	88.7	1.85
Sample E	87.3	1.80	98.7	1.85
Sample F	102.0	1.82	129.0	1.83
Sample G	47.8	1.72	60.9	1.89
Median	88.0	1.80	90.7	1.85

Figure 1: 1.0% Agarose gel of GeneFix-stabilised saliva stored for 16 months, and 64 months.

- DNA Yields and purities are maintained during the study period.
- DNA maintains high molecular weight bands on an agarose gel, with minimal degradation over the 5 year period.



Conclusion:

Salivary DNA samples collected into GeneFix saliva collection & stabilisation kits remain stable for up to sixty four months (5.3 years) when stored at ambient temperatures, retaining high yields, purities, and DNA integrities of.