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Your Choice to Collect Saliva DNA

— Zeesan Saliva DNA Sample Collection Kit



ZEEAN
— For Life We Care —

极简之美
SMART DESIGN

优雅尽显
BEAUTIFUL INNOVATION

01 | The best way to collect saliva DNA sample should be

- ▶ Safe
- ▶ Simple & Fast
- ▶ Non-invasive
- ▶ Stable at room temperature



02 Highlights

- ▶ The 1st CFDA approved saliva DNA kit in China
- ▶ Covers the most market share in China
- ▶ Upgraded through three generations



03 VIP customers and downstream applications



NGS



qPCR



Microarray

04 | What is Zeesan Saliva DNA kit?

Funnel

The elliptical shape and 45° symmetry waist line design make the saliva delivery easy and fast

Preservation Solution Tube

Preservation Solution Tube is installed in the collection tube to prevent leakage.

Tapered "Switch"

The tapered end design of the Collection Tube makes the preservation solution flow out smoothly when funnel is removed.



Scale Mark

Scale mark indicates the volume of saliva required (2mL) clearly.

Tube Cap

The integrated design makes the collection kit cap removed from the bottom of collection tube and reseal the tube easily.



05 Certificate & Patent

- ▶ CFDA & CE approved
- ▶ ISO 9001 & ISO13485
- ▶ Chinese patents:
 - CN 102676501 A
 - CN 206761712 U
 - CN 202505391 U
- ▶ International patents:
 - PCT: United States, European Union, Japan and South Korea



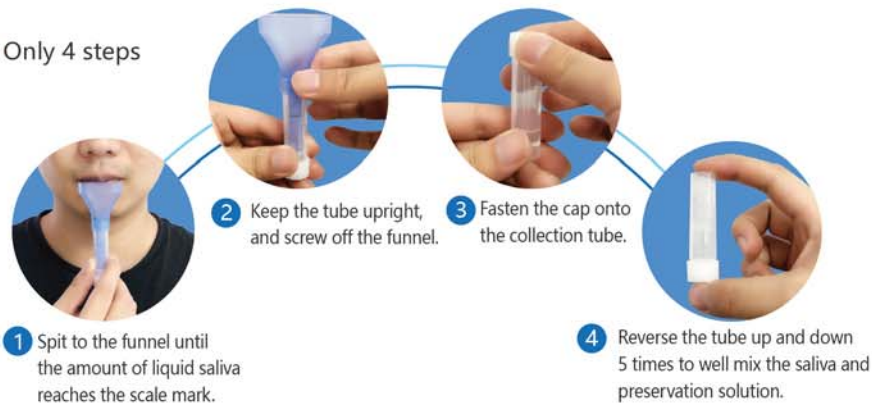
06 Production Volume

- ▶ The 1st automated assembly line in China
- ▶ Current production: 5,000 kits per day
- ▶ Up to 10,000 kits can be produced per day



07 How to collect saliva DNA sample?

► Only 4 steps



08 Stability testing

The preserved saliva DNA is stable for one year at 37°C or RT

No.	Temperature	Concentration (ng/ μ L)						
		1 st day	1 st month	2 nd month	3 rd month	6 th month	9 th month	12 th month
1	37°C	52.31	54.91	51.00	52.65	50.88	50.78	52.80
	RT	52.31	53.63	53.68	52.45	50.28	51.40	49.83
2	37°C	35.58	33.12	32.13	30.60	33.28	31.40	29.43
	RT	35.58	34.43	32.08	32.03	31.75	30.68	30.30

Table1. Preserved saliva DNA concentration in different periods

08 Stability testing

The preserved saliva DNA is stable for one year at 37°C or RT

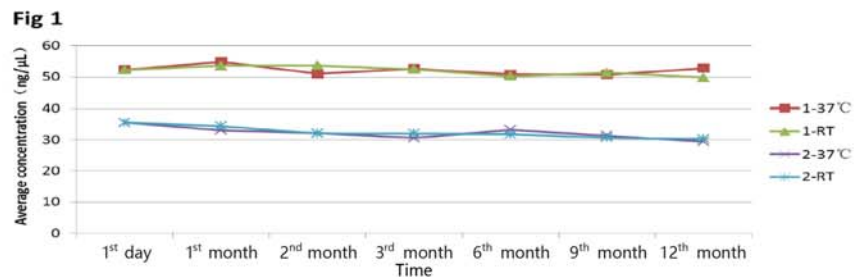


Figure1. Extracted DNA concentration in different periods

09 Extracted DNA integrity

No.	Temperature	Ct value	
		1 st month	12 th month
1	37°C	22.52	22.67
		22.60	22.52
	RT	22.73	22.56
		22.78	22.94
2	37°C	23.77	24.07
		23.61	24.17
	RT	23.74	23.72
		24.05	23.45

Table 2. PCR testing results of β -Actin from saliva DNA sample in different periods

09 | Extracted DNA integrity

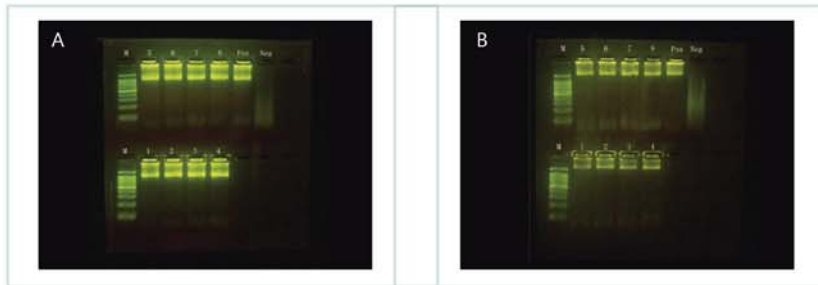


Figure 2. The electropherogram of (A) 1Kb and (B) 2Kb fragments (*β-Actin*) amplified products (after storage at 37°C or RT for 12 months)

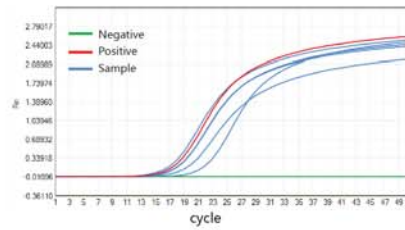
10 | Saliva DNA yield

Results were from 841 saliva samples (1mL). The lowest DNA yield is 6.26 µg and the highest is 264.67 µg.

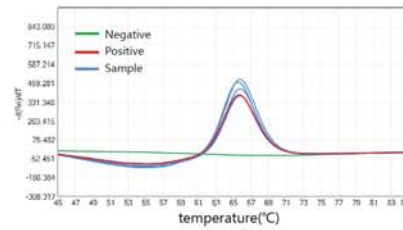
No.	260/280	260/230	DNA yield (µg)
001	1.76	2.20	49.39
002	1.77	1.66	72.07
003	1.95	2.41	6.26
...
840	1.85	2.53	264.67
841	1.81	2.25	24.19
AVG	/	/	23.08

11 An example of application

1) Melting curve analysis of *ALDH2* using saliva derived DNA



Amplification curve



Melting curve

11 An example of application

2) Extracted gDNA : Saliva DNA sample vs Blood sample

Number	A230 nm	A260 nm	A280 nm	A320 nm	Concentration (ng/ μ L)	Purity
Blood 1	0.344	0.868	0.498	0.067	40.050	1.860
Blood 2	0.415	1.011	0.590	0.095	45.800	1.850
Saliva 1	0.375	0.903	0.515	0.060	42.150	1.850



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