stratec molecular

SalivaGene Collector

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Saliva collection for stabilization of DNA

The novel SalivaGene Collector introduces a breakthrough simplification of saliva collection designed to provide highest DNA yields in high quality. The patented lyophilized stabilization buffer supersedes cooling of samples and stabilizes genomic DNA for 12 months at room temperature.

EFFORTLESS SELF-COLLECTION

- Pre-filled sample collection tubes for easy saliva collection using lyophilized DNA stabilization buffer
- Fast, painless and non-invasive sample collection
- Reduces puncture-associated infection risks
- Ideal for needle-phobic people and children
- No medical personnel required

LESS COSTS AND SAMPLE MANAGEMENT

- Less costs and easy sample management
- No cooling chain during transport
- Easy storage without refrigeration for up to 12 months
- High quality DNA from saliva samples without degradation

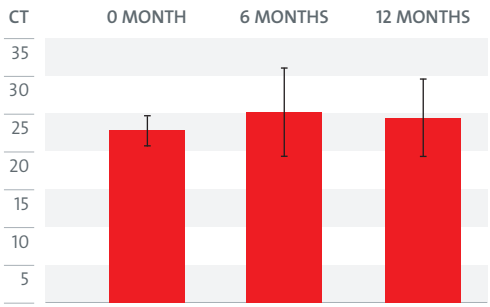
FLEXIBLE DNA PURIFICATION USING THE SALIVAGENE COLLECTOR

1. SPIN COLUMNS – PSP® SALIVAGENE DNA KIT

Manual spin filter kit based on STRATEC Molecular's expertise in nucleic acid purification

Fig. 1: Mean CT values of real-time PCR reactions using primers for GAPDH of DNA aliquots from 200 µl of saliva after 0, 6 and 12 months of storage in PSP® SalivaGene buffer at room temperature (average of 10 different samples, single determinations). DNA was manually isolated using the PSP® SalivaGene DNA Kit.

FIG. 1: REAL-TIME PCR OF STABILIZED SALIVA SAMPLES



2. FULLY AUTOMATED ON THE INVIGENIUS® – INVIMAG® SALIVAGENE DNA KIT/IG

SalivaGene Collector tubes (barcode labeled) can directly be placed into the sample loading racks of the InviGenius® for automatic sample detection

Fig. 3: Genomic DNA was automatically purified on the InviGenius® from 1.6 ml of stabilized saliva samples (pooled samples of ten different donors). 10 µl were analyzed on a 0.8 % agarose gel stained with ethidium bromide. (Marker – GeneRuler™ DNA Ladder, Fermentas)

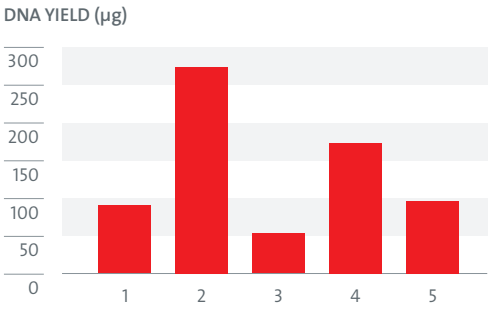
FIG. 3: SEAMLESS INTEGRATION INTO AUTOM. WORKFLOWS

3. PRECIPITATION

Manual method for bulk quantities

Fig. 4: Five different saliva samples were stabilized using the SalivaGene Collector. The genomic DNA was isolated from 2 ml of stabilized saliva samples using the standard precipitation protocol and measured on a Nanodrop™.

FIG. 4: HIGH DNA YIELDS FROM SALIVA SAMPLES



COMPARISON OF DNA YIELDS USING DIFFERENT EXTRACTION METHODS

PURIFICATION METHOD	SAMPLE VOLUME	TYPICAL DNA YIELDS
Spin columns	500 µl	25 – 50 µg
Fully automated on the InviGenius®	1.6 ml	25 – 150 µg
Precipitation	2 ml	50 – 250 µg
DNA from blood (spin columns)	200 µl	4 – 12 µg

SMARTER DNA SAMPLE STABILIZATION AND PURIFICATION

NO LEAKAGE OF LIQUIDS
Using a dry DNA stabilization buffer

INTUITIVE USE AND HANDLING FOR SELF-COLLECTION
Easy- to-close tubes with »click-caps«

HIGHEST DNA YIELDS
High quality DNA from saliva performs as well as blood-derived DNA on downstream applications

IMMEDIATE STABILIZATION UPON COLLECTION
Reduces potential for errors

SNP PROFILING FOR PHARMACOGENOMICS

FIG. 5: GENOTYPING RESULTS FOR SNP RS9934438 IN VKORC1 GEN

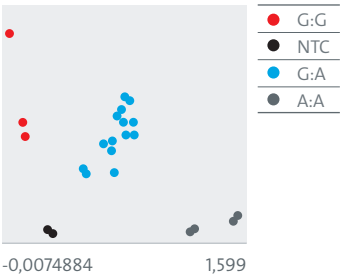


Fig. 5: Genotyping of selected SNPs (Single Nucleotide Polymorphisms) for 11 randomly selected individuals was performed using a KASP assay system (KBioscience, Herts, UK). Genomic DNA of each subject was tested in duplicates. A genotyping accuracy rate of 100 % was obtained. The genotyping success rate was between 91 and 100 %. Genotyped samples marked in red are homozygous for the G-, those marked in blue are homozygous for the A-allele. Heterozygous samples are marked green. Two negative controls (marked in black) were included on each genotyping plate.

The gene product of VCORC1 is involved in metabolism of coumarin derviative drugs (Warfarin®, Marcumar®).

Data kindly provided by D. Steinberger, bio. logis – Center for Human Genetics, Frankfurt am Main, Germany.

PRODUCT	PACKAGE SIZE	CATALOGUE NUMBER
SalivaGene Collector	50 pieces	1035210200
PSP® SalivaGene DNA Kit	50 purifications	1035200200
	250 purifications	1035200300
InviMag® SalivaGene DNA Kit / IG	8 × 12 preps	2435260100

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