

Technical Note – Oragene® Saliva

Automated Genomic DNA Isolation from 1-4 ml Saliva Samples

In collaboration with DNA Genotek Inc., AutoGen has developed a new, large-volume saliva protocol that can process up to 4 ml of solution from Oragene® collection devices. FlexSTAR workflows use precipitation chemistry that allows labs to conveniently process between 1 and 30 saliva samples, of up to 4 ml each, per run, in less than 2.5 hours. Using the FlexSTAR+, labs can directly load an Oragene collection device into the instrument, step away to perform other laboratory tasks, and then return to find their eluted DNA in its storage tube, ready for downstream applications.

- 100% total automation with the FlexSTAR+ from Oragene collection tube to final storage tube.
- Fast processing time – less than 2.5 hours for 30 samples, up to 4 ml each.
- Significant cost-per-prep savings compared to other extraction methods.
- High molecular weight DNA – immediately ready to use and suitable for all downstream applications.
- Stable DNA suitable for long term storage.

AutoGen DNA from Oragene 500 and 600 series collection devices

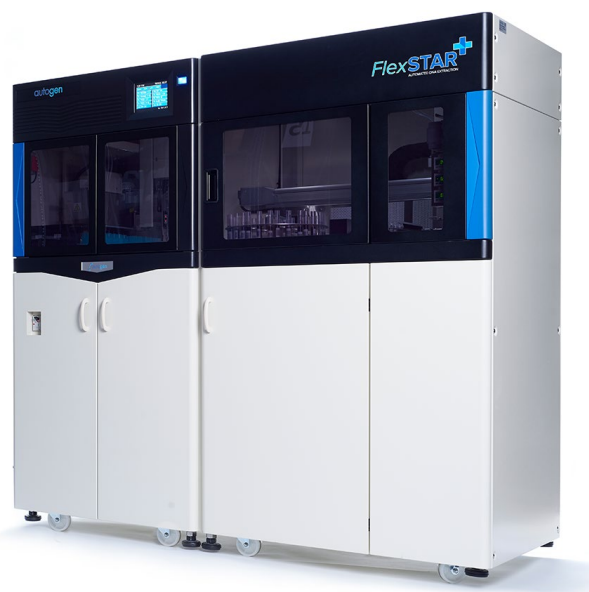
Input Vol	Concentration (ng/ul) AVG.	260/280 AVG.
4 ml Oragene	275.22	1.89

AutoGen FlexSTAR and FlexSTAR+

Totally automated solution for large volume saliva DNA extraction. From primary tubes to final DNA storage tubes with FlexSTAR+.

Key Features

- Full automation of up to 4 ml saliva, from primary tube to output tube.
- Significant cost saving advantages compared to other isolation methods.
- High throughput and convenient processing from 1-30 samples per run.
- Fully integrated sample tracking with LIS interfacing.
- Archival quality DNA.



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Isolation Method

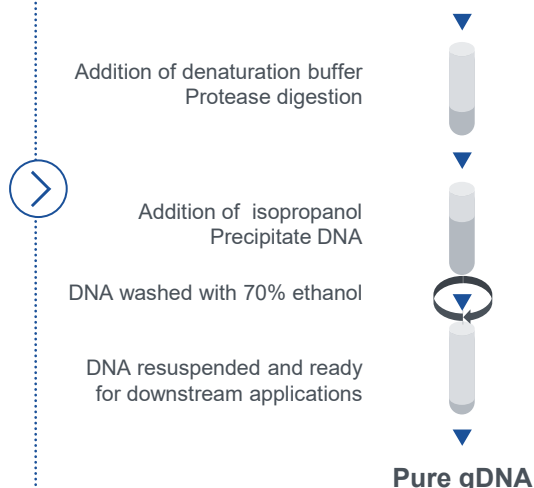
The Oragene saliva protocol incorporated into the FlexSTAR workflows has been developed together with DNA Genotek Inc. to use Autogen’s FlexSTAR Saliva DNA Kit. Labs begin by incubating the collection device per the DNA Genotek pre-extraction procedure.

After this incubation is complete and short centrifugation is performed, the Oragene collection device, containing up to 4 ml of saliva lysate, is directly loaded onto the FlexSTAR+. The sample tubes are automatically scanned by sample tracking software and aspirated into the FlexSTAR workflow processing plasticware by the onboard liquid handler. The samples undergo protease digestion and proteins are collected using the FlexStar purifier and centrifugation.

The supernatant containing DNA is treated with isopropanol to precipitate the DNA. The DNA is washed in alcohol solutions and is then resuspended and ready for downstream use.

Oragene DNA Procedure on FlexSTAR workflows

Oragene lysate aspirated on FlexSTAR+



Ordering Information and Kit Performance

PRODUCT #	PRODUCT NAME	SAMPLE SIZE	PROCESSING TIME	TYPICAL YIELD	STANDARD ELUTION VOL.
AGKT-3FXOD3	FlexSTAR Saliva DNA Kit with Tubes	1-4 ml	< 2.5 hours	15 – 35 ug/ml	300–1000 ul

AutoGen's promise is to provide the most practical, economically effective solutions for your sample prep and automated extraction needs, with the highest levels of service, support, and responsiveness in the industry.

Oragene is a registered trademark and DNA Genotek is a trademark of DNA Genotek, Inc.