

AutoGenFlex STAR Application Guide

Oragene•DNA Saliva 2

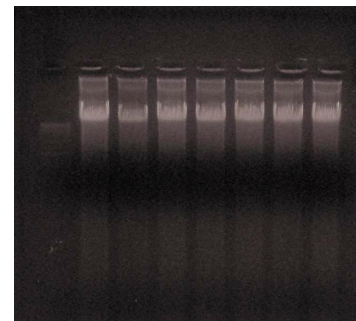


- I. **Purpose:** To extract genomic DNA from saliva samples collected using the Oragene•DNA Self-Collection Kit.
- II. **Chemical Principal:** Oragene lysis, non-organic deproteinization and alcohol precipitation.
- III. **Pretreatment of Saliva:**
 - A. Collect saliva by following the Oragene•DNA Self-Collection Kit User Instructions.
 - B. Incubate at 50°C for 2 hours to overnight with shaking in a waterbath or dry incubator.
- IV. **Protocol Parameters:**
 - A. **Sample Volume and Preparation:** 2.0 ml of digest solution.
 - B. **Maximum Number of Samples:** 40 samples per run.
 - C. **Processing Time:** 4 hours for 40 samples.
 - D. **Yield:** 20-100 µg of purified DNA per 2ml Oragene•DNA saliva solution.
 - E. **Quality:** Typical OD_{260/280} values are > 1.6.
The DNA can be used directly in downstream processes such as fluorescence DNA sequencing, PCR and restriction endonuclease digestions.
- V. **Running the Protocol:**
 - A. Load Reagents and Samples
 - B. Select a Protocol
 - C. Enter Number of Samples
 - D. Start the Run

VI. Example of genomic DNA obtained from Oragene•DNA:

Gel conditions: 3µl DNA out of 300µl, 3µl dye, 80 VAC, 1 hour, 48.5kb marker. The gel shows high molecular weight DNA.

* Oragene•DNA Self-Collection Kits are available from DNA Genotek (www.dnagenotek.com)



VII. Extraction and Purification Process

Process Site	Purpose	System Process
1. Manual	Digest Proteins	Mix 2ml saliva with 2ml Oragene•DNA liquid.
2. Automated	Precipitate Protein	Add Reagent R7, mix and centrifuge. Transfer supernatant to DNA tube.
3. Automated	Precipitate DNA	Add Reagent R4, agitate, centrifuge, discard supernatant.
4. Automated	Wash DNA	Add Reagent R5, mix, centrifuge, discard supernatant. Repeat several times.
5. Automated	Evaporate Alcohol	Transfer DNA tube to incubation rack.
6. Automated	Resuspend DNA	Add Reagent R3, mix and centrifuge.

* All reagents and consumables are sold as a complete kit for Oragene•DNA Saliva extraction on the AutoGenFlex Catalog #AGKT-FXSD-2.

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