

# Technical Note - Buffy Coat from 10ml Whole Blood

## Automated Genomic DNA Isolation from Buffy Coat Samples Derived from 10ml Whole Blood

AutoGen offers different levels of automation to serve every laboratory interest based on workflows and budget. Our FlexSTAR workflows are the first and only totally automated systems using Qiagen's FlexiGene chemistry to isolate genomic DNA free of RNA contamination. Our proven FlexiGene precipitation chemistry produces high quality, high molecular weight genomic DNA ready for long-term storage.

- Ready to use DNA – up to 840 ng/μl of buffy coat derived from 10ml whole blood.
- Fast processing time – up to 30 x 10ml buffy coat samples in 2-3 hours.
- High molecular weight – up to 150 kb suitable for all downstream applications.
- Long term stability suitable for long term storage.

Buffy Coats derived from 10ml whole blood isolated on the FlexSTAR Platform

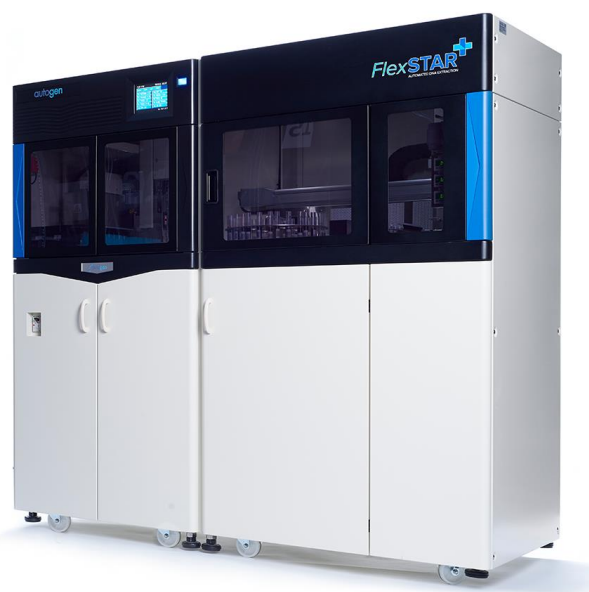
Sample ID	Elution Volume	Yield (ng/μL)	260/280	260/230
1	1 mL	454.37	1.84	2.23
2	1 mL	839.6	1.89	2.22
3	1 mL	770.03	1.89	2.21

## AutoGen FlexSTAR and FlexSTAR+

Total automated workflow for large volume buffy coat DNA extraction from primary tube samples to final DNA storage tubes with FlexSTAR+.

### Key Features

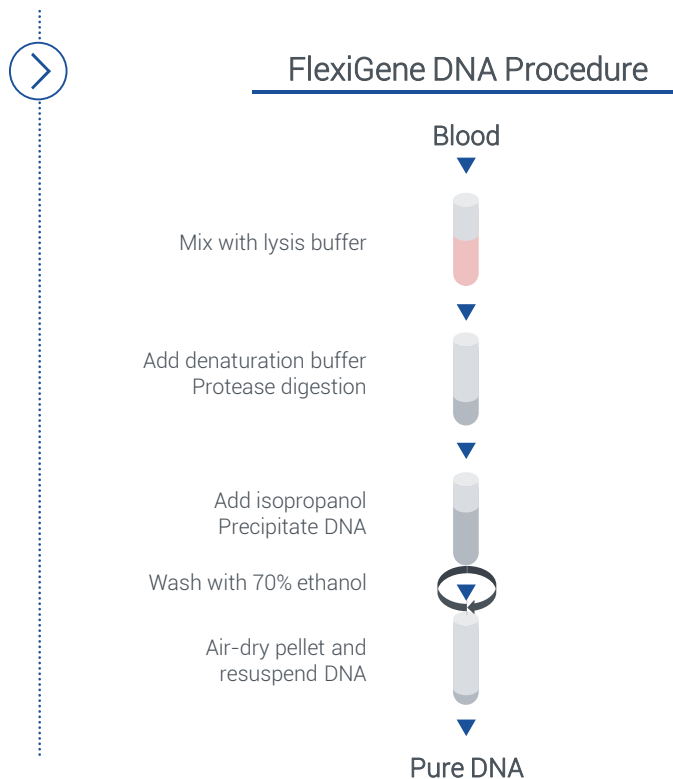
- Primary tube sampling from 0.5ml-10.0 ml
- High throughput, 30 samples / run
- Bar code reading / sample tracking
- LIMS compatibility
- Archival quality DNA



# Technical Note - Buffy Coat from 10ml Whole Blood

## Flexigene Principle and Procedure

Lysis buffer is added to the sample (see flowchart). Cell nuclei and mitochondria are pelleted by centrifugation, effectively facilitating the removal of RNA contaminants. The pellet is resuspended and incubated in denaturation buffer, which contains a chaotropic salt and QIAGEN Protease. This step efficiently removes contaminants such as proteins. DNA is precipitated by addition of isopropanol, recovered by centrifugation, washed in 70% ethanol, dried, and resuspended in hydration buffer (10 mM Tris-Cl, pH 8.5).



## Ordering Information and Kit Performance

PRODUCT #	PRODUCT NAME	SAMPLE SIZE	PROCESSING TIME	TYPICAL YIELD (ug/ml)	STANDARD ELUTION VOL.
AGKT-FG-640	AGF Fresh Flexigene Reagent Kit	0.5–10ml	2–3 hours	20–40	300–1000
AGKT-2FG-640	AGF Plus Fresh Flexigene Reagent Kit	0.5–10ml	2–3 hours	20–40	300–1000
AGKT-FG-640-FZ	AGF Frozen Flexigene Reagent Kit	0.5–10ml	2–3 hours	20–40	300–1000

*AutoGen's promise is to provide the most practical, economically effective solutions for your sample prep and automation extraction solution needs, and to do it with a level of service, support, and responsiveness that leads the industry.*