

Extracta™ genomic DNA preparation kits

DNA EXTRACTION MADE EASY

QUANTA's Extracta sample preparation system can be scaled to process various amounts of solid tissue in a simple and fast single-tube procedure. DNA may be purified from many tissue types and is suitable for use in sensitive downstream applications such as PCR, qPCR and High Resolution Melt Analysis.



Quanta
BIOSCIENCES™

FEATURES AND BENEFITS

- Simple, fast protocol
- Compatible with laboratory automation
- DNA is suitable for qPCR, High Resolution Melt Analysis, endpoint PCR and other applications
- Works with wide range of tissue including hair, buccal swabs and mouse tails
- Optional 10 minute protocol for high-throughput applications

EXTRACTA TECHNOLOGY

Extracta DNA Prep for PCR is a two-component reagent kit for rapid extraction of PCR-ready genomic DNA from mammalian tissues. Tissues are processed in 35 minutes with little hands-on time. Compared to a conventional proteinase K process this is significantly faster with fewer handling steps (Figure 1). The genomic DNA is suitable for sensitive downstream PCR applications including end-point PCR, High Resolution Melt Analysis (HRM) and quantitative real-time PCR (qPCR) without requiring any additional clean-up (Figures 2 & 3). In addition, the extracted DNA may be used in multiplexed PCR applications such as transgene or knock-out analyses. Tissue extractions can be done in tubes, plates or deep-well blocks to allow for adaptation to workflow and automation on liquid-handling workstations.

Tissue Sample Sizes and Extraction Reagent Volumes

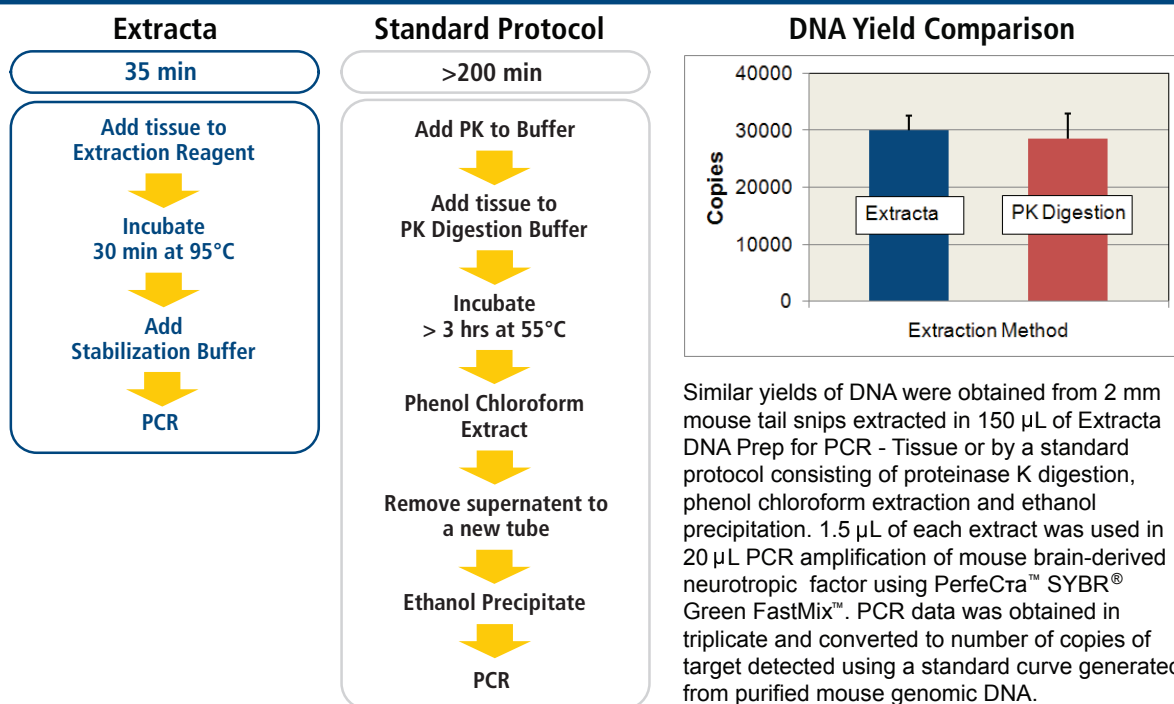
Sample	Size	Volume	Comments
Mouse tails	0.2 to 0.5 cm	75 µL	Fresh or frozen tail samples can be used. Tail samples should be less than 0.5 cm.
Mouse ear punches	1 to 2 mm	50 µL	Ensure that the ear punches are completely submerged in Extraction Reagent.
Animal tissues	2 to 10 mg	100 µL	Tissue samples should be small and completely submerged in Extraction Reagent.
Buccal swabs	1 buccal brush or swab	250 µL	Collect cheek cells using a buccal brush or swab and place into Extraction Reagent in a 1.5 mL microcentrifuge tube. Twirl the brush or swab in the Extraction Reagent and carefully press and rotate the brush or swab against the side of the tube while removing it from the solution to ensure that most of the liquid remains in the tube.
Hair	1-3 hairs with root	75 µL	Trim hair shaft to 0.5 cm leaving the root intact and place root end down into Extraction Reagent.
Saliva	10-20 µL	100 µL	Mix samples well in Extraction Reagent.

ORDERING INFORMATION

PRODUCT	Quanta Cat. No.	Pack Size
Extracta DNA Prep	95091-025	25mL
	95091-250	250mL

PROTOCOL SPEED AND YIELD COMPARISON

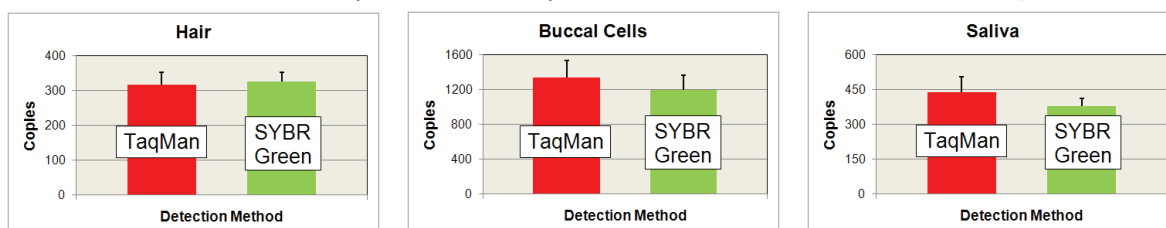
Figure 1



HUMAN TISSUES

Figure 2

Extracta extracts produce similar TaqMan® and SYBR Green results for human IL1 β



PerfeCtra qPCR SuperMix with a TaqMan probe and PerfeCtra SYBR Green FastMix

MULTIPLEX GENOTYPING

Figure 3

