

Genomic DNA Purification

OneDrop PCR-Blood Kits

High throughput genomic DNA purification for PCR amplification – single well, two step protocol

- ⇒ Fast – DNA isolation and PCR setup of 96 whole blood samples in just 40 minutes
- ⇒ Simple – two-step procedure, no special equipment required
- ⇒ Sensitive and accurate PCR results – no quantification required, start PCR in same plate
- ⇒ Easy to automate – single well procedure, no centrifugation, no vacuum, no elution

OneDrop PCR-Blood Kits provide an ultra-fast and convenient method for high throughput purification of genomic DNA from blood and other samples for subsequent amplification such as real-time PCR, endpoint PCR or whole genome amplification.

Principle

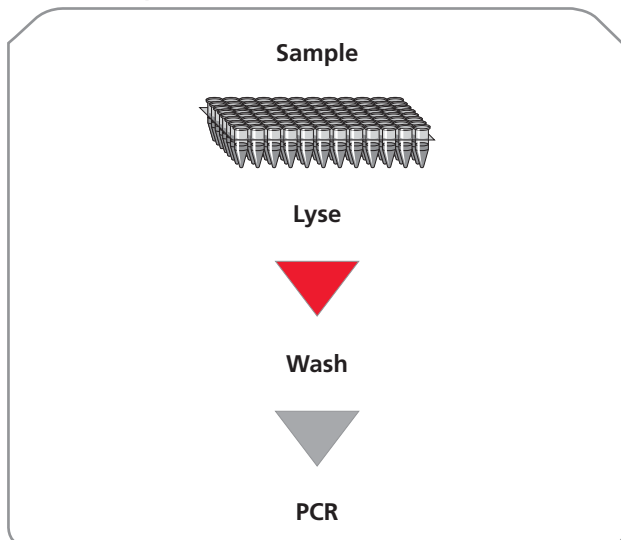
OneDrop PCR-Blood Kits offer a simple, single-well two-step procedure for purification of genomic DNA. Sample lysis, wash step and setup of the amplification reaction are all performed in the same well. After cell lysis, DNA is bound to the proprietary well surface. Contaminants are removed by a simple wash step and subsequently the PCR reaction can be setup in the same well.

the wells is ready to use for PCR analysis. PCR mix is directly added to the wells and the plate is placed into the cycler.

Genomic DNA preparation from whole blood or cultured cells using the OneDrop PCR-Blood Kit typically provides yields of 7 – 15 ng DNA per well.

The whole procedure for 96 samples takes just 40 minutes from sample lysis to the start of the PCR.

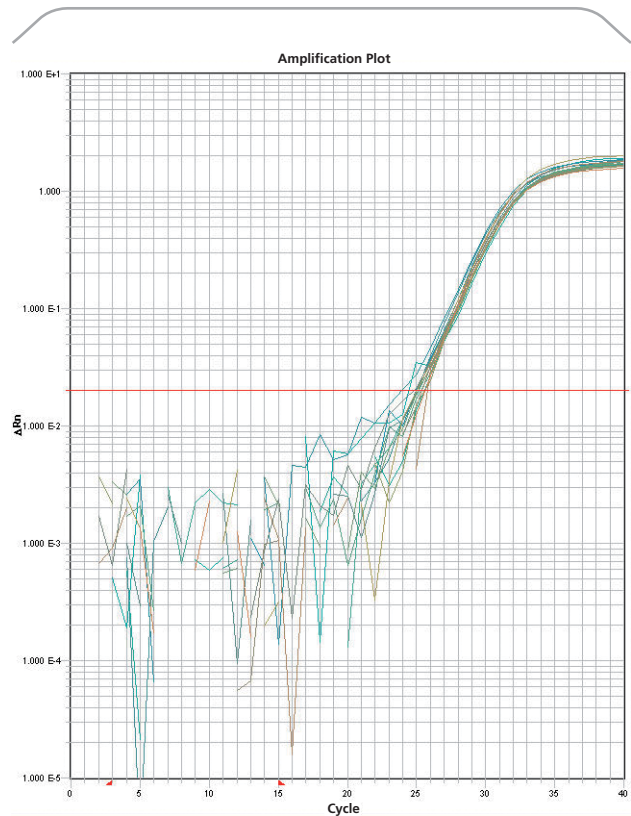
OneDrop PCR-Blood Procedure



Fast and simple procedure

Genomic DNA is isolated from 10 μ l – 20 μ l of whole blood (animal and human) and other samples such as cultured cells and buccal swabs by simply adding the Lysis Buffer to the sample and incubating for 20 minutes at room temperature. The lysate is then aspirated and Wash Buffer is added to the wells. After removing the Wash Buffer the DNA bound to

Reliable detection of the TNF α single copy gene



Genomic DNA from 10 μ l whole blood from one donor was isolated using the OneDrop PCR-Blood Kit. The single copy gene TNF α was amplified using the 5 PRIME RealMasterMix SYBR ROX Kit. Mean C_t was 25.2 ± 0.5 (15 samples).

Reliable PCR results without quantification

There is no need for time consuming quantification of DNA prior to PCR. Purification with the OneDrop PCR-Blood Kit results in the optimal amount of DNA for one PCR amplification per well. As shown in the figures DNA purified with the OneDrop PCR-Blood Kits can be used directly for reliable detection of single copy genes (previous page) and housekeeping genes (this page) by real-time PCR. The OneDrop PCR-Blood Kit is the ideal sample purification method for high-throughput screening analysis.

Easy to automate

The simple and fast single-well procedure is ideally suited for automation using general liquid handling instruments. There is no need for modules such as vacuum manifolds, centrifuges, or shakers, making the OneDrop PCR-Blood Kit the perfect solution for high-throughput processing.

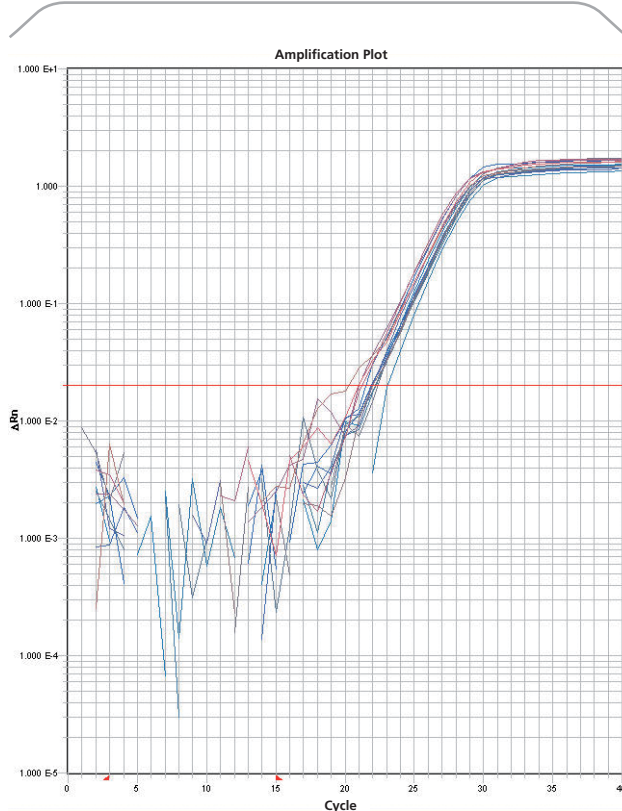
Compatibility with 5 PRIME PCR reagents and kits

Genomic DNA purified with the OneDrop PCR-Blood Kit has been tested extensively with PCR and real-time PCR reagents and kits. For a complete list of 5 PRIME PCR reagents and kits please visit www.5PRIME.com.

Compatibility with thermal cyclers

OneDrop 96-well Plates are compatible with all common 96-well format PCR cyclers, real-time PCR cyclers, and sequencers. For a complete list of compatible cyclers and sequencers please visit www.5PRIME.com.

Accurate detection of β -actin



Genomic DNA from 10 μ l whole blood from one donor was isolated with OneDrop PCR-Blood Kit. The housekeeping gene β -actin was amplified using the 5 PRIME RealMasterMix SYBR ROX Kit. Mean C_t for donor was 22.2 ± 0.7 (15 samples).

Ordering Information

Ref. No.	Product Name	Quantity	Kit Components
FP2303000	OneDrop PCR-Blood Kit – 2 Plt	192 preps	OneDrop 96-well Plates, Lysis Buffer OD,
FP2303010	OneDrop PCR-Blood Kit – 10 Plt	960 preps	Wash Buffer OD, Cover Films

For ordering 5 PRIME products please visit our web page www.5PRIME.com to find your local distributor.
For further information, please send an email to info@5PRIME.com.

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