

Product Profile

QIAamp® 96 DNA Blood Kit

For high-throughput purification of genomic or viral DNA

The QIAamp 96 DNA Blood Kits are molecular biology kits that allow rapid and efficient purification of genomic and viral DNA from a wide variety of samples, such as blood, plasma and other body fluids. The kits are for molecular biology applications only.

The QIAamp 96 DNA Blood Kits are:

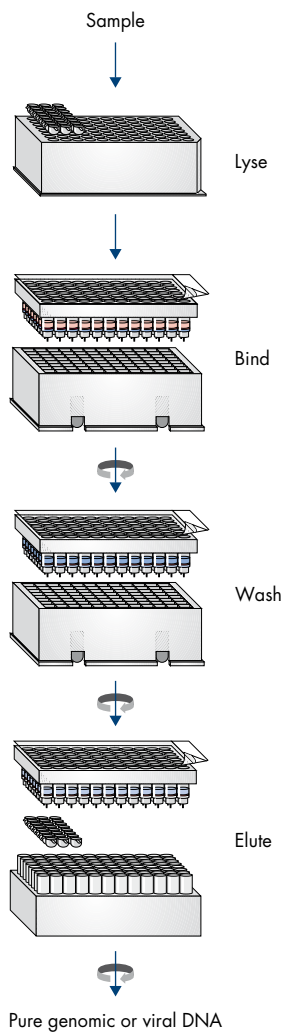
- Reliable, with reproducible, high-throughput sample preparation
- Convenient – no organic extraction or lengthy alcohol precipitation
- Efficient removal of inhibitors

Convenient procedure

The QIAamp 96 system allows fast and efficient purification of genomic and viral DNA from many types of body fluids. Up to 192 samples can be processed in 2–3 hours with the QIAamp 96 DNA Blood Kit. Even higher throughput can be achieved by staggering the procedure. Efficient removal of enzyme inhibitors and impurities ensure QIAamp purified DNA is ready-to-use in downstream amplification reactions.

The entire procedure is performed in a 96-well format for optimized handling. The procedure (see flowchart next page) utilizes an optimized lysis buffer containing a high concentration of chaotropic salts in combination with protease digestion to lyse samples completely. Following lysis, alcohol is added to the samples to promote selective DNA binding to the unique silica-gel-based QIAamp membrane. The lysates are then loaded onto a QIAamp 96 plate for convenient spin purification using the QIAGEN® 96-Well Plate Centrifugation System. DNA binds specifically to the membrane, while impurities pass through. Inhibitors of PCR and other enzymatic reactions, such as divalent cations and proteins, are removed by two efficient wash steps. Pure DNA is then eluted in low-salt buffer or water, ready for use in all downstream applications.

QIAamp 96 DNA Blood Procedure



Reliable purification for all applications

The QIAamp 96 procedure is ideal for purification of DNA for subsequent use in amplification or Southern blotting procedures, including:

- Viral detection
- Genetic testing research
- Cancer biomarker discovery
- Identity testing

QIAamp 96 plates provide well-to-well uniformity in DNA recovery and purity. Reproducible yields of 6 µg of genomic DNA can be achieved from 200 µl of blood* (Figures 1 and 2) with average A_{260}/A_{280} ratios of 1.7–1.8, indicating absence of contaminating proteins.

Reduced handling decreases the risk of cross-contamination and increases safety by minimizing contact with infectious samples.

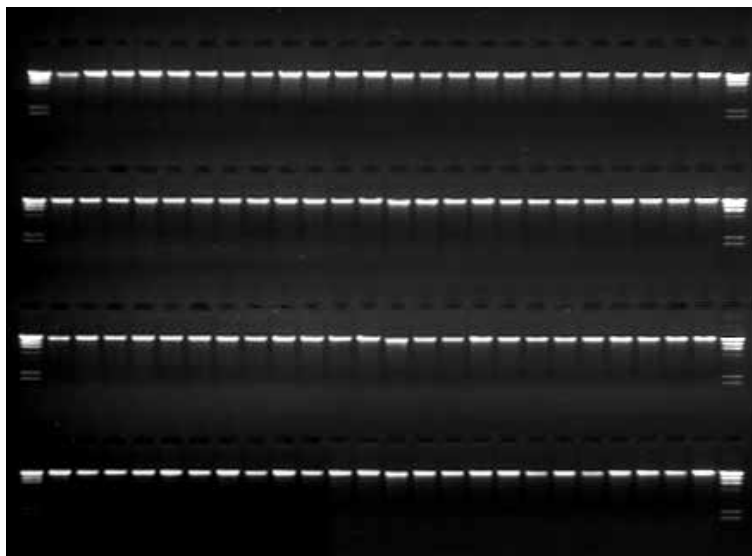


Figure 1 Sample reproducibility. Gel electrophoresis of 96 DNA preparations purified from a single sample of whole human blood using the QIAamp 96 DNA Blood Kit. End lanes contain lambda-HindIII markers.

* Blood treated with any common anticoagulant.

Isolate DNA from a wide range of sample sources

QIAamp 96 DNA Blood Kits permit fast and efficient purification of highly pure viral, mitochondrial or genomic DNA from fresh or frozen whole blood, serum, buffy coat, bone marrow, body fluids or cell suspensions.

QIAamp 96 DNA Blood Kits come complete with all necessary buffers, reagents, plasticware and a comprehensive handbook.

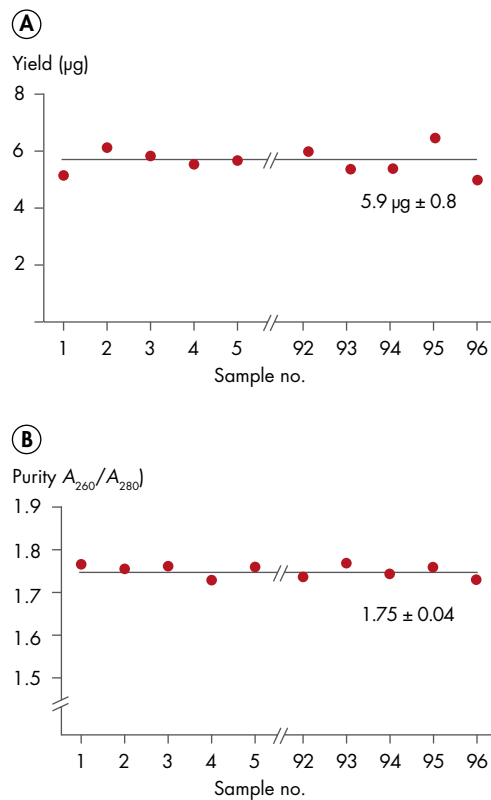


Figure 2. Reproducibility of yield and purity. A. DNA yields (in μg) and B. purity of 96 preparations isolated from a single donor and purified using the QIAamp 96 DNA Blood Kit. Mean values and standard errors from 10 such experiments are shown.

Ordering Information

Product	Contents	Cat. no.
QIAamp 96 DNA Blood Kits – for high-throughput isolation of genomic and viral DNA from blood		
QIAamp 96 DNA Blood Kit (4)*	For 4 x 96 DNA preps: 4 QIAamp 96 Plates, QIAGEN Protease, Reagents, Buffers, Lysis Blocks, Tape Pads, Collection Vessels	51161
QIAamp 96 DNA Blood Kit (12)*	For 12 x 96 DNA preps: 12 QIAamp 96 Plates, QIAGEN Protease, Reagents, Buffers, Lysis Blocks, Tape Pads, Collection Vessels	51162
QIAGEN 96-Well-Plate Centrifugation System		
Centrifuge 4-16	Universal laboratory centrifuge with brushless motor (100 V, 50/60 Hz)	81300 [†]
Centrifuge 4-16	Universal laboratory centrifuge with brushless motor (120 V, 60 Hz)	81310 [‡]
Centrifuge 4-16	Universal laboratory centrifuge with brushless motor (220 V, 50 Hz)	81320 [¶]
Centrifuge 4-16K	Universal refrigerated laboratory centrifuge with brushless motor (100 V, 50/60 Hz)	81400 [†]
Centrifuge 4-16K	Universal refrigerated laboratory centrifuge with brushless motor (120V, 60 Hz)	81410 [‡]
Centrifuge 4-16K	Universal refrigerated laboratory centrifuge with brushless motor (220 V, 50 Hz)	81420 [¶]
Plate Rotor 2 x 96	Rotor for 2 QIAGEN 96 plates, for use with QIAGEN Centrifuges [§]	81031 [§]

* Requires use of the QIAGEN 96-Well-Plate Centrifugation System.

[†] For Japan.

[‡] For US.

[¶] For rest of world.

[§] The Plate Rotor 2 x 96 is available exclusively from QIAGEN and its distributors. Under the current liability and warranty conditions, the rotor may only be used in Centrifuges 4-16 and 4016KC from QIAGEN and freely programmable models of centrifuges f4-15, 4K15, 6-10, 6K10, 6-15 and 6K15 from Sigma Laborzentrifugen GmbH.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, Sample to Insight®, QIAamp® (QIAGEN Group).

© 2015 QIAGEN, all rights reserved. PROM-3746-002

Ordering www.qiagen.com/contact | Technical Support support.qiagen.com | Website www.qiagen.com