

DNA isolation from blood

The **Invisorb® Spin Blood Mini Kit** is the ideal tool for fast and convenient purification of genomic DNA from human and animal blood as well as from buffy coat or bone marrow. Fresh or frozen whole blood treated with EDTA or citrate, but not with heparin, from common blood collection systems can be used. Prior separation of leukocytes is not necessary. The purified genomic DNA is of high quality and can be used for subsequent downstream applications (PCR, real-time PCR, hybridization, SNP analysis, genotyping).

Product characteristics

- **Starting material:** up to 200 µl human/ animal whole blood (EDTA, Citrate); up to 25 µl non-mammalian blood; up to 30 µl buffy coat; up to 20 µl bone marrow
- **Average yield:** up to 10 µg (in average 6 µg), depending on amount of lymphocytes, sample source, transport and storage
- **Preparation time:** approx. 25 min

Benefits

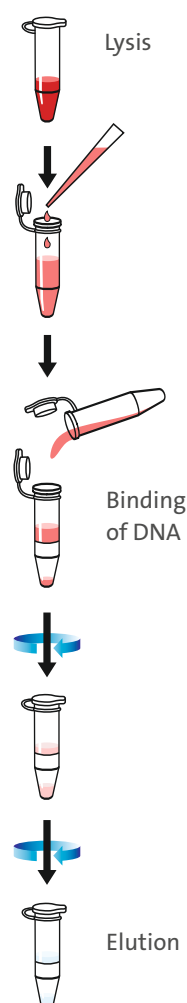
- Fast & safe handling: no additional erythrocyte lysis, capped spin columns
- Flexible system: compatible with a variety of anticoagulants and tubes
- For In Vitro Diagnostic Use (CE-IVD)*

*) Compliance with EU Directive 98/79/EC on in vitro medical devices (Not for in vitro diagnostic use in countries where the EU Directive 98/79/EC on in vitro medical devices is not recognized.)

Ordering information

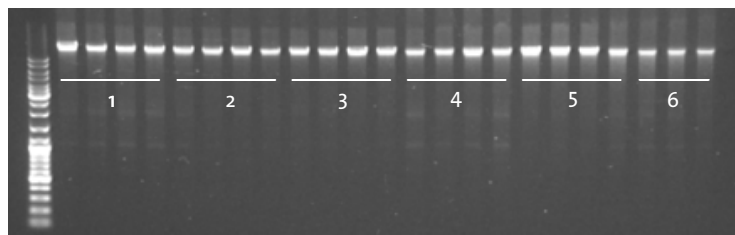
PRODUCT	PACKAGE SIZE	CATALOGUE NUMBER
Invisorb® Spin Blood Mini Kit	50 purifications	1031100200
	250 purifications	1031100300

Workflow



APPLICATION EXAMPLE

Influence of different blood collection systems on DNA recovery



Genomic DNA was isolated from 100 µl of the same blood sample, stabilized with different anticoagulants: EDTA and citrate. Six different blood collection systems were used (see table).

10 µl of the DNA eluates were loaded onto a 0.8 % agarose gel, stained with ethidium bromide. (Marker - GeneRuler™ DNA Ladder, Fermentas)

Sample No.	Primary tube	Manufacturer	Nominal Volume	Catalogue number
1	Venosafe, EDTA	TERUMO	5.5 ml	VF-0765SDK
2	Vacurette, Citrate	Greiner Bio-One	2 ml	454382
3	Vacutainer, Citrate	BD	2.7ml	363048
4	Vacurette, EDTA	Greiner Bio-One	9 ml	455036
5	Monovette, Citrate	Sarstedt	8.5 ml	01.1610.001
6	Vacutainer, EDTA	BD	6 ml	367864

Selected references

Impact of -455G/a polymorphism of the β -fibrinogen gene on platelet aggregation in patients with acute coronary syndrome.

Sevimli S, Karakoyun S, Bakirci EM, Topcu S, Kalkan K, Borekci A, Vançelik S. Clin Appl Thromb Hemost. 2014 Apr;20(3):238-43

A polymorphic microsatellite repeat within the ECE-1c promoter is involved in transcriptional start site determination, human evolution, and Alzheimer's disease.

Li Y, Seidel K, Marschall P, Klein M, Hope A, Schacherl J, Schmitz J, Menk M, Scheffe JH, Reinemund J, Hugel R, Walden P, Schlosser A, Volkmer R, Schimkus J, Kölsch H, Maier W, Kornhuber J, Frölich L, Klare S, Kirsch S, Schmerbach K, Scheele S, Grittner U, Zollmann F, Goldin-Lang P, Peters O, Kintscher U, Unger T, Funke-Kaiser H. J Neurosci. 2012 Nov 21;32(47):16807-20.

N-Acetyltransferase 2 genetic polymorphisms and risk of colorectal cancer.

da Silva TD, Felipe AV, de Lima JM, Oshima CT, Forones NM. World J Gastroenterol. 2011 Feb 14;17(6):760-5

Related products

PRODUCT	PACKAGE SIZE	CATALOGUE NUMBER
Invisorb® Blood Mini HTS 96 Kit/ C	4 x 96 purifications	7031300300
	24 x 96 purifications	7031300400
InviMag® Blood DNA Mini Kit/ KF96	1 x 96 purifications	7431300100
	5 x 96 purifications	7431300200
Invisorb® Blood Universal Kit	500 ml	1031150200
	1000 ml	1031150300