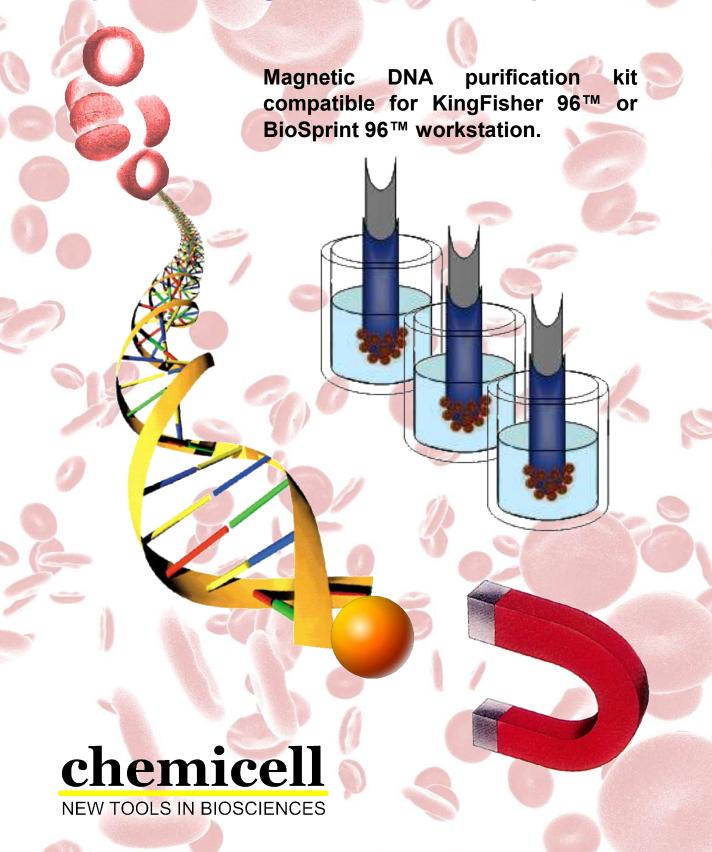
# geneMAG-DNA 96 / Blood

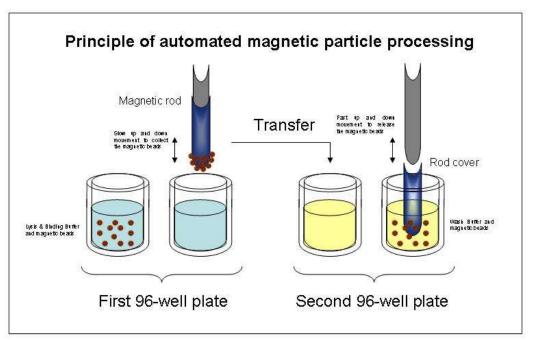
compatible for KingFisher™ 96 and BioSprint™ 96



# **Technology**

The **geneMAG-DNA 96** *I* **Blood** kit is a novel, simple and highly efficient tool for isolation of genomic DNA with magnetic silica beads using the KingFisher™96 or BioSprint™ 96 workstations. The DNA can be isolated from blood samples including fresh, frozen, anti-coagulated blood, buffy coat.

The lysis of cells and binding of DNA is carried out under non-chaotropic conditions with the Lysis & Binding Buffer. The wash steps with Wash Buffer I and II guarantee a clean DNA which is suitable for PCR reactions or other biochemical applications.



The magnetic bead processing of KingFisher™ 96 / BioSprint™ 96 workstation

The KingFisher™ 96 workstation is a trademark of Thermo Fisher Scientific.

The BioSprint™ 96 workstation is a trademark of Qiagen.

#### **Products**

Kits	Contents	Number of isolations	Price Euro/US\$
geneMAG-DNA 96 / Blood (Cat. No.: KF3001-96)	<ul><li>80 ml Lysis &amp; Binding Buffer</li><li>200 ml Wash Buffer I</li><li>10 ml SiMAG/KF-DNA Beads</li></ul>	1 x 96 preps per 100 µl blood	185 / 240
geneMAG-DNA 480 / Blood (Cat. No.: KF3001- 480)	<ul><li>400 ml Lysis &amp; Binding Buffer</li><li>1000 ml Wash Buffer I</li><li>50 ml SiMAG/KF-DNA Beads</li></ul>	5 x 96 preps per 100 µl blood	725 / 942

# Reagents and Equipment to be Supplied by the User

• Wash Buffer II: 70% ethanol or 70% 2-propanol

• Elution Buffer: ddH2O

• KingFisher™ 96 / BioSprint™ 96 workstation

Deep well 96-well plates (2,2 ml) squared well

• KingFisher™ 96 plate (0,3 ml)

Magnet Head for deep well 96-well plates

# **Storage**

The kit compounds are stable at room temperature. If there are salt precipitates in the Lysis/Binding Buffer or Wash Buffer I dissolve these precipitates by warming in a water bath.

# **Safety Note**

**Wash Buffer I** contain chaotropic salts, which are irritant. Take appropriate laboratory safety measures and wear gloves when handling. **Avoid skin and eye contact** 

# Protocol for KingFisher™ 96 or BioSprint 96™

This protocol describes the isolation of genomic-DNA from 100µl blood per each well of 96-well plate with the geneMAG-DNA 96 / *Blood* kit using KingFisher™ 96 or BioSprint™ 96 workstation.

Preparation of the deep well 96-well plates (2,2 ml)

#### First 96-well plate:

- 1. Add 100 µl blood in each well
- 2. Add 800 µl Lysis & Binding Buffer and 100 µl SiMAG/KF-DNA.

## Second 96-well plate:

1. Add 1000 µl Wash Buffer I in each well

#### Third 96-well plate:

1. Add 1000 µl Wash Buffer I in each well

### Fourth 96-well plate:

1. Add 1000  $\mu$ l Wash Buffer II (70% 2-propanol) in each well

# Fifth 96-well plate:

1. Add 1000 µl Wash Buffer II (70% 2-propanol) in each well

# Sixth 96-well plate: Use 96-well plate with max. volume of 0,3 ml

1. Add 100 µl Elution Buffer (dH<sub>2</sub>O) in each well

Seventh 96-well plate: Parking station!!!!

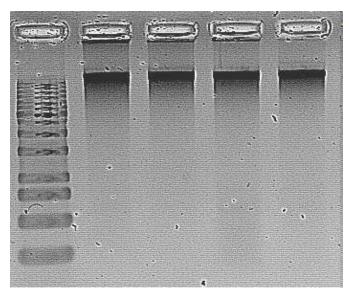
# Protocol for KingFisher™ 96 or BioSprint™ 96

Settings of the processing times for Lysis- & Binding-, Wash- and Elution steps:

#### Start the KingFisher™ Software and set the following parameters:

- Lysis & Binding process (first deep-well plate):
   6 minutes with low stirring
- 2. Wash process with Wash Buffer I (second deep-well plate):1 minutes with medium stirring
- 3. Wash process with Wash Buffer I (third deep-well plate):1 minutes with medium stirring
- **4.** Wash process with Wash Buffer II (fourth deep-well plate): 1 minutes with medium stirring
- 5. Wash process with Wash Buffer II (fifth deep-well plate):1 minutes with medium stirring
- **6.** Elution process with Elution Buffer (dH<sub>2</sub>O):

  Heat time: 10 minutes with high stirring
  Temperature: 80°C



Agarose gel (1%): Analysis of genomic DNA from 100 µl human whole blood. Genomic DNA was purified using the KingFisher™ 96 according to the geneMAG-DNA 96 / *Blood* protocol. (Data kindly provided by Cengiz Öztürk, Charité, University Hospital of Humboldt-University to Berlin, Germany)

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