geneMAG-DNA / *Saliva*

the magnetic DNA purification kit

For isolation of genomic DNA from saliva with magnetic beads

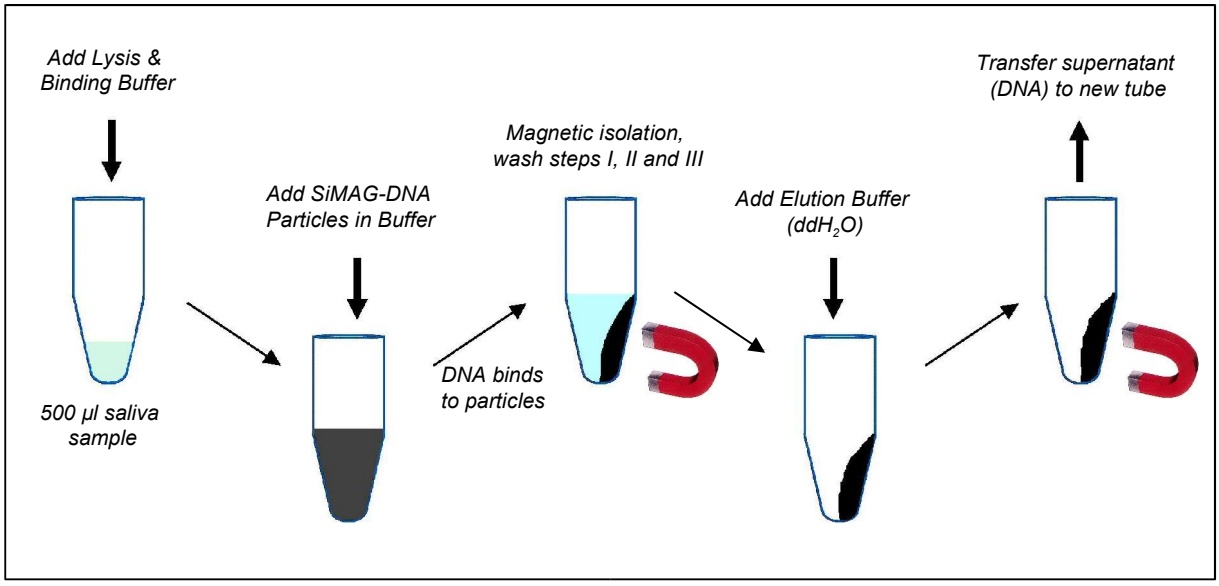
chemicell

NEW TOOLS IN BIOSCIENCES

The **geneMAG-DNA / *Saliva*** kit is a novel, simple and highly efficient tool for the isolation of genomic DNA with magnetic silica beads. The DNA can be isolated from saliva.

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, II and III guarantee a clean DNA which is suitable for PCR reactions or other biochemical applications.

geneMAG-DNA / *Saliva* is highly suitable for a variety of automatization platforms since it requires no centrifugation or vacuum filtration procedures.



Products

Kits	Contents	Number of isolations	Price Euro/US$
geneMAG-DNA / Saliva 15 (Cat. No.: 3301-15)	• 15 ml Lysis & Binding Buffer • 30 ml Wash Buffer I • 1.5 ml SiMAG-DNA Beads	15 preps per 500 µl saliva	40 / 52
geneMAG-DNA / Saliva 100 (Cat. No.: 3301-100)	• 100 ml Lysis & Binding Buffer • 200 ml Wash Buffer I • 10 ml SiMAG-DNA Beads	100 preps per 500 µl saliva	220 / 286
geneMAG-DNA / Saliva 500 (Cat. No.: 3301-500)	• 500 ml Lysis & Binding Buffer • 1000 ml Wash Buffer I • 50 ml SiMAG-DNA Beads	500 preps per 500 µl saliva	900 /1170

Reagents and Equipment to be Supplied by the User

- **Wash Buffer II**: 70% Ethanol or 70% Isopropanol
- **Wash Buffer III and Elution Buffer:** ddH_2O
- **Vortex mixer** and **heating block** or water bath (60°C), **magnetic separator**

Storage

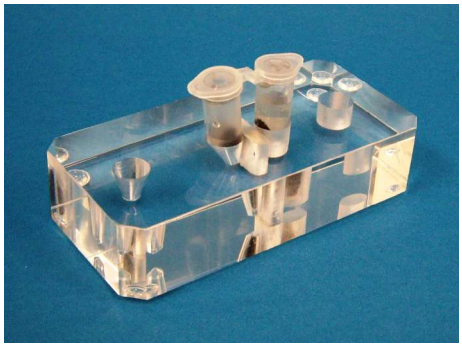
The kit compounds are stable at room temperature. If there are salt precipitates in the Lysis/Binding Buffer or Wash Buffer I redissolve these precipitates by warming in a water bath.

Safety Note

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

Utensils for magnetic DNA purification

The **MagnetoPURE** separator is specially designed for magnetic separation of DNA/RNA in 1.5 ml and 2 ml tubes. The position of the high powerful magnet guaranties fast and easy separation of the magnetic particles.



MagnetoPURE

MagnetoPURE BIG SIZE

Separator	Cat. No.:	Price Euro/US$
MagnetoPURE	MP-10	65 / 85
MagnetoPURE BIG SIZE	MP-20	350 / 460

SPECIAL OFFER

As an introductory offer you will recieve a **geneMAG-DNA 15** kit for free in combination with the purchase of the **MagnetoPURE** separator.

SPECIAL OFFER:	Cat. No.:	Price Euro/US$
MagnetoPURE **geneMAG-DNA 15**	3301-SO	65 / 85

Protocol

This protocol describes the isolation of genomic-DNA from 500 µl of whole saliva, respectively spittle or buccal swabs.

Saliva sample – spittle:
To minimize a possible contamination of cells originate from food or drink in the sample the person providing the saliva sample should not consume any comestible goods 30 min prior to sample collection. In order to clean the mouth from any food particles that may be existent, mouth rinsing with water should be performed for about 10 seconds. Eight minutes later the salvia can be collected by spitting in sufficient amount into an appropriate vessel. Transfer 500 µl in a 1.5 ml microcentrifuge tube.
Proceed by **step 1.**

Saliva sample – buccal swab:
To minimize a possible contamination of cells originate from food or drink in the sample the person providing the saliva sample should not consume any comestible goods 30 min prior to sample collection. In order to clean the mouth from any food particles that may be existent, mouth rinsing with water should be performed for about 10 seconds. After rinsing collect buccal cells by scraping a swab (10 times) firmly against the inside of each cheek. Place the buccal swab in a 1.5 ml microcentrifuge filled with 500 µl phosphate-buffered saline (PBS).
Proceed by **step 1.**

1. Spin the sample for 5 minutes in a microcentrifuge at a speed (4,000 × *g*). Remove and discard the supernatant.

2. Add 1 ml **Lysis & Binding Buffer**, vortex for 30 seconds and incubate for 5 minutes at room temperature.

Tip: *Vortex the tube from time to time to get a complete lysis of the sample.*

3. Add 100 µl **SiMAG-DNA** silica beads to the supernatant, vortex and incubate for 2-3 minutes at room temperature.

Tip: *Before use resuspend the magnetic beads completely by vortexing*

4. Place the tube on a magnetic separator for 30 seconds and collect the bead/DNA-pellet. Remove and discard the supernatant.

Tip: *Some of the solution with beads will end up in the cap of the tube. The tube can be tipped or turned upside down, while placed in the magnet, to wash down the beads trapped in the cap.*

5. Add 1 ml **Wash Buffer I** and vortex at room temperature. Collect the bead/DNA-pellet for 30 seconds with the magnet, remove and discard the supernatant. Repeat washing step **once**.

6. Add 1 ml **Wash Buffer II** and vortex for 5 seconds. Collect the bead/DNA-pellet for 30 seconds with the magnet, remove and discard the supernatant. Repeat washing step **once** with **Wash Buffer III**.

Attention: *During the wash process with Wash Buffer III vortex for 1 second.*

7. Add 100 µl **Elution Buffer (ddH_2O)**, vortex and incubate for 10 minutes at 65 °C in a thermo-mixer and vortex the tube from time to time for the complete resuspension of the pellet.

Tip: *Complete resuspension of the pellet is important to recover high yields of DNA.*

8. Collect the beads with the magnet and transfer the solution with the eluted DNA to a new clean tube. If the solution is not clear, repeat the step to remove remaining magnetic beads.

Tip: *The isolated DNA can be stored at 2-8 °C in a refrigerator, but for a long term storage - 20 °C is recommended.*

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