

MB522PC16 HiPurA® Pre- filled Cartridges for Semen DNA Purification

Kit Contents

Product Code	Reagents provided	MB522PC16
		48 PR
PF16W1	Pre-filled Cartridge for Semen DNA Purification	48 no
LA1118B	Magnetic Rod tip	12 no
DS1005A	Magnetic Beads	1 ml
DS0013	Proteinase K	1 ml
DS0040	Elution Buffer (ET) [10mM Tris-Cl, pH8.5]	7 ml
DS0015	Lysis Solution (AL)	9 ml

Intended Use

Recommended for isolation of DNA from Semen samples.

Introduction

HiPurA® Pre- filled Cartridges for Semen DNA Purification provides the fastest and easiest way to purify DNA for reliable use in amplification technologies. HiPurA® Pre- filled Cartridges for Semen DNA Purification can be used for isolation of genomic DNA from various species, but the performance may vary depending on the sample type.

HiPurA® Pre- filled Cartridges for Semen DNA Purification

This kit carries out efficient extraction of genomic DNA from various species. Sample is first lysed under the highly denaturing conditions provided by Lysis Solution to inactivate DNases and to ensure isolation of intact genomic DNA. The DNA purification procedure comprises of three steps viz. adsorption of DNA to the magnetic beads, removal of residual contaminants and elution of pure genomic DNA. The magnetic beads have a high binding capacity and high-quality genomic DNA is obtained from various species. The DNA obtained is compatible with downstream applications such as restriction enzyme digestion, PCR and Southern blotting.

Elution

The yield of DNA depends on the sample type and the number of cells in the sample. A single elution with Elution Solution will provide sufficient DNA to carry out multiple amplification reactions.

Storage

HiPurA® Pre- filled Cartridge for Semen DNA Purification can be stored at room temperature (15-25°C) for up to 2 years without showing any reduction in performance. We advise a certain storage temperature for the reagents listed below:

- On receipt store Proteinase K (DS0013): at -20°C.
- On receipt store Magnetic Beads (DS1005A): at 2-8°C.

Materials needed but not provided

- 1M DTT (DL-Dithiothreitol) (Product Code: ML205)
- 55°C water bath or heating block (For Lysate Preparation)
- Cartridge holder (Product Code: LA1118CH)
- Tabletop Microcentrifuge (with rotor for 2.0 ml tubes) TabSpin® 012 (Product Code: LA1090)
- Insta NX® Mag16 (Product Code: LA1118B)
- Insta NX® Mag32 (LA1096)
- Vortex
- HiPer® Lock Microcentrifuge Tube, 2.0ml (Product Code: MBLA017)

General Preparation Instructions

1. Preheat a water bath or heating block to 55°C.
(For Lysate preparation)
2. **Thoroughly mix reagents**
Examine the reagents for precipitation. If any kit reagent forms a precipitate (other than enzymes), warm at 55-65°C until the precipitate dissolves and allow cooling to room temperature (15-25°C) before use.
3. Ensure that clean & dry Nuclease-free tubes and tips are used for the procedure.
4. Vortex magnetic beads before use.

Specimen Handling and Collection

Collect human/animal semen sample in a sterile container and freeze the sample at -20°C for short term storage or -80°C for long term storage. Ensure that the sample is at room temperature before beginning the protocol.

Type of Specimens

Clinical/ Animal samples: semen sample

Procedure

1. **Treatment with Lysis Solution (AL) (DS0015)**
Add 180 µl of Lysis Solution (AL) (DS0015) to 100 µl of semen sample.
2. **Prepare for cell lysis**
Add 20 µl Proteinase K (DS0013) and 8 µl 1M DTT (not provided). Mix thoroughly by vortexing for 10-15 seconds and incubate at 55°C for 30 minutes. **This will be your pre- processed sample.**

Set up processing cartridge as follows:

1. Switch on the UV light for 10 minutes prior to use.
2. Open the door of Insta NX® Mag16 machine.
3. Select “**MB522M**” program.
4. Place the Pre-filled Cartridge for Semen DNA Purification (PF16W1) into the Cartridge Holder (LA1118CH). Remove the seal from the Pre-filled Cartridge for Semen DNA Purification (PF16W1).

NOTE: Take care while peeling off the seal. Hold the Cartridges firmly by one hand and then peel off the seal by holding it in your other hand without shaking.

5. Add **100µl of Elution Buffer (ET)** [10mM Tris-Cl, pH8.5] (DS0040) in the **6th well of the Pre-filled Cartridges for Semen DNA purification (PF16W1).**
6. Add the **pre- processed sample** into **1st well of the Pre-filled Cartridge for Semen DNA Purification (PF16W1).**
7. Add **20µl of Magnetic Beads (DS1005A)** in **1st well of the Pre-filled Cartridge for Semen DNA Purification (PF16W1).**
8. Place the Magnetic Rod Tip (LA1118B) by sliding onto the machine.

NOTE: After placing the rods ensure that the rods are properly fixed on their place.

9. Close the door of Insta NX[®] Mag16 machine.
 10. Click on the **RUN** option on the home screen.
- After the run is complete, remove the Pre-filled Cartridge for Semen DNA Purification (PF16W1) from the position. Discard the Magnetic Rod Tip (LA1118B). Dispense the eluted DNA from well 6 to a new HiPer[®] Lock Microcentrifuge Tube, 2.0ml (Product Code: MBLA017) (not provided). The eluate contains pure DNA.

NOTE: If small amount of magnetic beads are observed in the final eluate then keep the cartridges along with cartridge holder on Magnetic pad (not provided) for 4-5 minute and collect supernatant carefully without disturbing beads pellet in new collection tube.

OR

Take out eluate in new collection tube and centrifuge at higher speed for around 1 min to pellet down the traces of Magnetic beads present in the eluate.

***NOTE: If you process less than 4 samples at a time please order LA1118B- Magnetic Rod Tip (Pack size- LA1118B-4no/ LA1118B-40no).**

Storage of the eluate with purified DNA: The recommended storage temperature for the eluted DNA is -80°C. Avoid repeated freezing and thawing of the sample which may cause denaturing of DNA.

Warning

Not for Medicinal Use. Read the procedure carefully before beginning the protocol. Wear protective gloves/protective clothing/eye protection/face protection. Follow good clinical laboratory practices while handling clinical samples. Standard precautions should be followed as per established guidelines. Safety guidelines may be referred in safety data sheets of the product.

Limitations

The yield of DNA depends upon the type and the volume of starting material used.

Performance and Evaluation

The yield and efficiency of purification is determined by performing Real- Time PCR.

Quality Control

Each lot of HiMedia's HiPurA® Pre- filled Cartridges for Semen DNA Purification is tested against predetermined specifications to ensure consistent product quality.

Safety Information

The HiPurA® Pre- filled Cartridges for Semen DNA Purification is for laboratory use only, not for drug, household or other uses. Take appropriate laboratory safety measures and wear gloves when handling. Not compatible with disinfecting agents containing bleach. Please refer the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.









Disposal

User must ensure safe disposal by autoclaving and/ or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed off in accordance with current laboratory techniques.

Technical Assistance

At HiMedia, we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance mail to mb@himedialabs.com.

Symbols

	Manufacturer		Do not use if package is damaged
	Catalogue number		Temperature limit
	Date of manufacture (YYYY-MM)		Consult instructions for use
	Use-by date (YYYY-MM)		
	Batch code		

Identification No.: PIMB522PC16
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Disclaimer :

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