【Product Name】 MagPure Bacterial DNA Kit

【Product specifications】 48 Preps, 96 Preps, 480 Preps

【Intended Use】

This product provide fast and easy methods for purification of total DNA for reliable PCR and Southern Blotting. Total DNA(e.g., genomic, plasmid) can be purified from bacterial cultures.

【Principle】

This product is based on the purification method of high binding magnetic particles. The sample is lysed and digested under the action of lysate and Lysozyme. DNA is released into the lysate. After adding magnetic particles and binding solution, DNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles were washed with washing solution to remove proteins and impurities, washed with ethanol to remove salts, and finally DNA was eluted by Elution Buffer.

【Kit Contents】

Cat.No.	D513101	D513102	D513103	Main Composition
Purification Times	48	96	480	-
MagPure Particles	1.2 ml	2.5 ml	11 ml	Magnetic Beads
Lysozyme	60 mg	120 mg	600 mg	Lysozyme
Proteinase K	24 mg	50 mg	220 mg	Proteinase K
Protease Dissove Buffer	3 ml	6 ml	30 ml	Tris/Glecorel/CaCl2
Buffer SDS	1.5 ml	3 ml	15 ml	SDS
Buffer MLA	30 ml	60 ml	300 ml	Guanidine Salt
Buffer GW1*	13 ml	44 ml	110 ml	Guanidine Salt
Buffer TE	30 ml	40 ml	200 ml	Tris/EDTA

【Storage conditions and Validity】

MagPure Particles, Lysozyme and Proteinase K should be stored at 2–8°C upon arrival. However, short-term storage (up to 12 weeks) at room temperature (15–25°C) does not affect their performance. The remaining kit components can be stored dry at room temperature (15–25°C) and are stable for at least 18 months under these conditions.

【Preparation before Use】

- Add 17ml (48Preps) or 56ml (96Preps) or 140ml (480Preps) absolute ethanol to the bottle of Buffer GW1 and store at room temperature.
- Add Protease Dissolve Buffer to the Proteinase K bottle to get a 20mg/ml concentration and store at -20~8℃ after dissolve.
- Add Protease Dissolve Buffer to the Lysozyme bottle to get a 50mg/ml concentration and store at -20~8℃ after dissolve.
- 75% ethanol

【Plate Protocol 】

1. **Transfer 0.5~1.5ml bacterial cultures into a new 1.5ml microcentrifuge tube and centrifuge at 13,000 x g for 1min to collect bacteria.**
2. Remove the liquid and then add 200μl Buffer TE and 20μl lysozyme to the sample. Mix well and incubate at room temperature for 10minutes.

   Buffer TE/lysozyme can be mixed in proportion in advance. Staphylococcus was treated and 1μl lysostaphin (20mg/ml) was added.
3. **Add 20μl Buffer SDS to the sample, mix well and incubate at 85℃ for 15minutes to lyse cells.**

   If RNA-free genomic DNA is required, add 10 μl RNase A (25mg/ml) (not provided) and incubate for 10min at room temperature.
4. **Add 500μl Buffer MLA, 20 μl MagPure Particles and 20 μl Proteinase K to the sample.** Mix again by shaking at 700~900rpm for 8 min. Place the tube to the magnetic stand for 1 minutes until the beads have formed a tight pellet. Then remove the supernatant.
5. **Add 500μl Buffer GW1** and vortex for 15 seconds to re-suspend beads. Place the tube to the magnetic stand for 1 minute until the beads have form a tight pellet. Then remove the supernatant.
6. **Add 500μl 75% ethanol,** and vortex for 15 seconds to re-suspend beads. Place the tube to the magnetic stand for 1 minute until the beads have form a tight pellet. Then remove the supernatant.

7. **Add 500μl 75% ethanol,** and vortex for 15 seconds to re-suspend beads. Place the tube to the magnetic stand for 1 minute until the beads have form a tight pellet. Then remove the supernatant.

8. Centrifuge shortly to collect liquid on the tube. Place the tube to the magnetic stand and remove all the liquid carefully. Air dry for 10 minutes.

9. **Add 50~100μl Buffer TE to the sample,** re-suspend the beads by vortex. Incubate at 55°C for 10 minutes by shaking. If there is no shaking device, vortex 2~3 times to mix.

10. Place the tube to the magnetic strand for 2 minutes. Transfer the supernatant containing the purified DNA to a clean 1.5ml centrifuge tube.

【KingFisher Flex Protocol】

1. Add the Reagents/sample to the well of the deep well plate according to the table below.

Name of the Plate	Pre-loaded reagents	Addition before use
Sample plate	1. Prepare bacterial lysis follow as step 1-3. 2. Add 500ul Buffer MLA and 20μl Proteinase K	
Wash Plate 1	500μl Buffer GW1,20μl MagPure Particles Put in 96 magnetic Tip	
Wash Plate 3	500μl 75% Ethanol	
Wash Plate 4	500μl 75% Ethanol	
Elute Plate	100μl Buffer TE	

2. Place a 96 tip comb for deep well magnets on Wash Plate 1.

3. Start the D5131_Flex protocol with the KingFisher Flex and load the plates.

4. Place the sample plate back into the instrument and press Start.

5. After the run is completed, remove the plates and store the purified total DNA.

【Basic Information】

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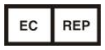
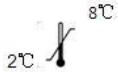
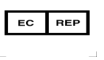
	**StateLab GmbH** Friedrich-Ebert-Strasse 7, 58642 Iserlohn, Germany

【Explanation of Marks】

	The product is used in vitro, please don't swallow		Please don't reuse it
	Validity		Please read the instruction book carefully before using
	Warning, please refer to the instructions in the annex		Manufacturer
	Temperature scope within which the product is reserve		Batch number
	European union authorization representativ		Keep dry
	Avoid overexposure to the sun		Don't use the product when the package is damaged