GeneCon™ kit

Cat. #	Product	Component	Size	Preps / Kit
GB-7003	GeneCon™ Kit	Reagent A	100 ml	700 test
		Reagent B	10 ml	
Storage：All reagents should be kept at 4℃				

Product description

The GeneCon™ kit is an innovative system that simplifies the extraction and concentration of nucleic acids from various agarose gel sources. The GeneCon™ kit recovers nucleic acid bands from 50bp to 100kb (5ng~500μg in mass) in all grades of agarose gel with yields more than 80%. The purified nucleic acids are suitable for ligation, probe labeling, restriction enzyme digestion, DNA sequencing, molecular cloning, and RT-PCR.

Additional materials required, but not supplied

- Phenol-chloroform (1:1)
- Absolute ethanol
- 3M sodium acetate，pH5.2
- Liquid nitrogen
- Porous ladle for immersing tubes into liquid nitrogen
- Microcentrifuge capable of reaching ≧12,000xg
- Polypropylene tubes

Kit storage

Store the kit at 4℃.

The stability of kit has been demonstrated over 1 year.

DO NOT REFRIGERATE. The crystal may form below 0℃. If salt crystals form, heat the kit until full suspension before using. Heating will not cause any loss of performance efficiency.

Precautions

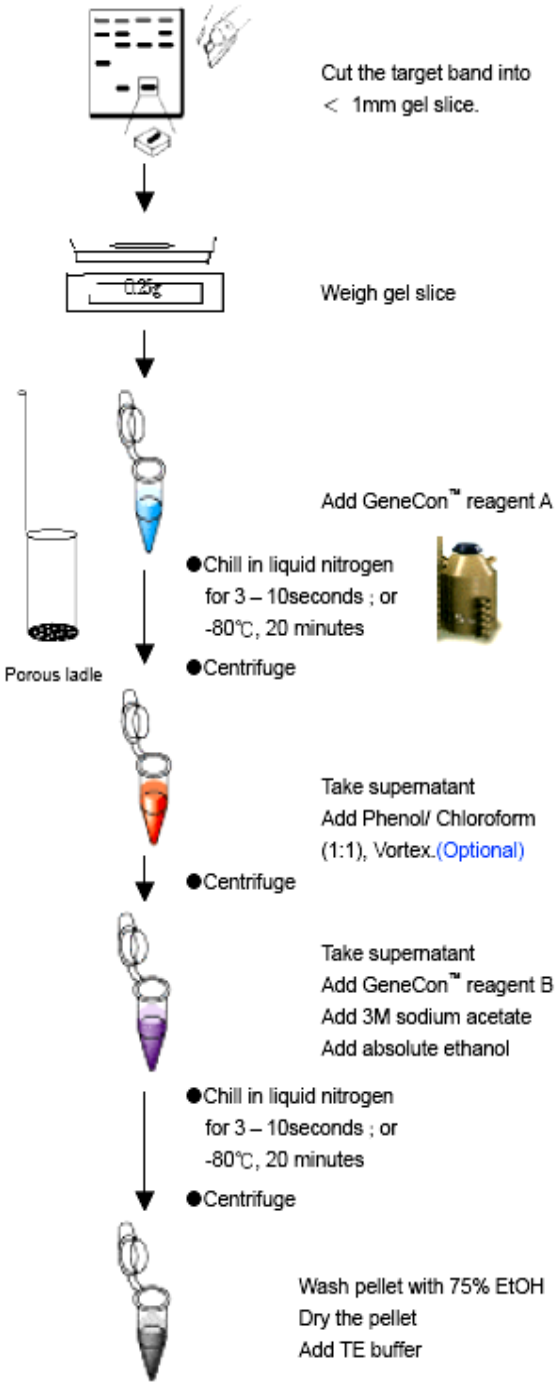
Wear glove when handling all reagents.

If eye or skin contact occurs, wash thoroughly with water.

This kit is for research purposes only. Not for diagnostic use.

Gel extraction protocol

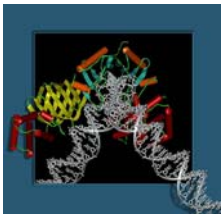
1. **Gel slice excision**：
   Cut the area of agarose gel containing the targeted DNA or RNA fragment by a clean and sharp blade. Cut the agarose gel into ＜ 1mm pieces.
2. **Gel slice weighing**：
   Transfer and weigh the agarose gel slice into a 1.5ml polypropylene tube. Add 0.12~0.15 μl of GeneCon™ reagent A for every 100 mg of gel.
3. Vortex to mix thoroughly, then chill in liquid nitrogen for 3-10 seconds with a porous ladle; or –80℃, 20minutes.
4. Centrifuge at 12000xg for 5-10 minutes at room temperature. Transfer the supernatant to another polypropylene tube.
5. **(Optional)**：Add equal volume of Phenol-chloroform(1:1) to the solution and vortex it. Centrifuge at 12,000xg for 2-5 minutes.
6. Transfer the supernatant which contains nucleic acids to another polypropylene tube.
   a. Add 1/10 volume of GeneCon™ reagent B.
   b. Add 1/10 volume of 3Msodium acetate，pH5.2.
   c. Add 2 volume of Absolute ethanol.
   d. Mix well.
7. Chill in liquid nitrogen for 3-10 seconds; or -80℃, 20 minutes.
8. Centrifuge at 12,000xg for 10 minutes.
9. Remove the supernatant, then wash the DNA pellet with 75% EtOH; Centrifuge at 12,000xg for 2 minutes.
10. Remove the 75% EtOH, dry the pellet by heat block or spin vacuum apparatus.
11. Resuspend the dry pellet with sterile water or 1xTE in the concentration that you want.



Troubleshooting guide

☐ If the yield is low, it may be:
Incomplete mixing of agarose gel pieces with reagent A.
The finer gel pieces will give higher recovery rate.
For larger sample mass (>250mg agarose gel), use a sterile toothpick to mix gel pieces and reagent A thoroughly.

☐ If the tube cap opens at room temperature after liquid nitrogen chilling; it may be:
Higher air pressure is produced within the tube at room temperature. The problem will be resolved by opening the tube for a while and closing the tube cap tightly before immersing tube into liquid nitrogen.



Genesis Biotech Inc.

2F-2, No.131, Lane 235, Bao-Chiao Rd., Hintien, Taipei hsien, Taiwan

TEL：+886-2-8919-1730 , 0800889198

FAX：+886-2-8919-1725

http://www.genesisbio.com.tw

E-mail：info@genesisbio.com.tw