Magnetic Beads gDNA Extraction Plate Kit (Blood)

96 Well Blood gDNA Extraction Plates (MBP096)

Sample : 200-300 µl of whole blood
Format : 96 well extraction plates
Equipment : Geneaid SYNC Nucleic Acids Extraction System
Operation time : 50 minutes/ 32 tests
Elution volume : 100 µl

CERTIFICATE NO. QAIC/TW/50077

www.geneaid.com

Introduction

Geneaid Magnetic Beads gDNA Extraction Plate Kit (Blood) was designed for high-throughput purification of high-quality of genomic DNA from whole blood and buffy coat samples. Genomic DNA is bound to the surface of the magnetic beads and released using a proprietary buffer system. The 96 well gDNA extraction plates can be easily adapted to Geneaid SYNC Nucleic Acids Extraction System (S032) and other similar automated extractors. The purified DNA can be used in qPCR and a variety of other downstream applications.

Quality Control

The quality of Magnetic Beads gDNA Extraction Plate Kit (Blood) is tested on a lot-to-lot basis according to Geneaid's ISO-certified quality management system by isolating genomic DNA from 200 µl whole blood samples.

Kit Contents

Component	MBP096	Description
Extraction Plates	6	96 well plate with reagent buffers
Proteinase K[1]	40 mg	Preparing 20 mg/ml Proteinase K
Strip	12	8-channel strip
Protocol	1	Instruction guide for user

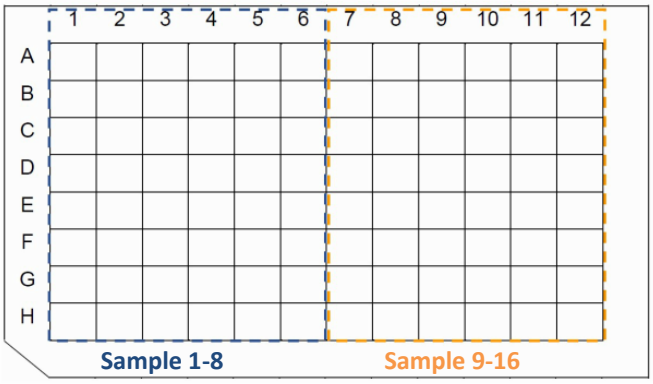
[1]Add 2 ml of sterile ddH_2O to Proteinase K powder then vortex to ensure it is completely dissolved. For extended periods, the Proteinase K solution should be stored at 4ºC.

Storage conditions

- Components under room temperature (15~35°C) can be stored until the expiration date labeled on the box.
- The Proteinase K is shipped at room temperature. After adding ddH_2O to dissolve Proteinase K powder, store the Proteinase K solution at 4ºC.

Extraction Plate Contents

Column	Buffer	Volume
# 1/7	Lysis Buffer	600 µl
# 2/8	Wash Buffer 1	800 µl
# 3/9	Wash Buffer 1	800 µl
# 4/10	Wash Buffer 2 with Magnetic Beads	800 µl
# 5/11	Wash Buffer 2	800 µl
# 6/12	Elution Buffer	100 µl



Important before use

1. Inspect the completeness of the Extraction Plates and Strips.
2. Do not shake the Extraction Plates vigorously to avoid the excess foam formation.
3. Remove the aluminum foil carefully to avoid splashing of the reagent solution.
4. After removing the aluminum foil, do not expose plates to air for a long time to avoid evaporation and changing pH then affecting purification efficiency.
5. Buffers contain chaotropic salt. During operation, always wear a lab coat, disposable gloves, protective goggles and (anti-fog) procedure mask. Guanidine salts can form highly reactive compounds when combined with bleach. **DO NOT** add bleach directly to the sample-preparation waste.

Magnetic Beads gDNA Extraction Plate Kit (Blood) Protocol

Automatic gDNA extraction	• Carefully remove the aluminum foil from Extraction Plate. • Transfer **200** (recommended) **- 300 µl of whole blood** into column #1/#7 of Extraction Plate and then add **20 µl of Proteinase K solution** into column #1/#7 of Extraction Plate. Note: **DO NOT** add the proteinase K directly into the Lysis Buffer, it might be affected the performance. • Turn on the **Geneaid SYNC Nucleic Acids Extraction System**. • Place the Extraction Plates on the plate rack of the **Geneaid SYNC Nucleic Acids Extraction System** and push the plate rack back into the extraction system. Note: Make sure that the missing corner of Extraction Plate faces toward the door panel. • Push strips completely to the bottom of strip rack frame. • Close the door panel. • Select the program "**MBP-Blood**". Please see the program below. • Once the program has ended, buzzer shall alarm. Take out Extraction Plate carefully. • Transfer the purified nucleic acid from column #6/ #12 to clean tubes. The purified nucleic acid can be used for subsequent experiments such as real-time PCR immediately or store at -20˚C for long time. • The used Extraction Plates and Strips should be regarded as medical waste with risk of biological infection and properly disposed of in accordance with national regulations.

MBP-Blood Program

Run	Well No. (0-6)	Name	Standby (0-30Min)	Mix (1-30Min)	Volume (100-1000µl)	Mix Speed (1-3)	Mag (0-120Sec)	Temp. (40-80˚C)	Pause
☑	4	Bead Transfer	0	1	800	2	30	75	☐
☑	2	Bead activation	0	1	800	2	0	75	☐
☑	1	Lysis	0	7	800	1	0	75	☐
☑	2	Bead Transfer	0	0	800	2	30	75	☐
☑	1	Binding	0	7	800	2	60	75	☐
☑	2	Wash 1	0	3	800	2	30	50	☐
☑	3	Wash 2	0	3	800	2	30	50	☐
☑	4	Wash 3	0	2	800	2	30	50	☐
☑	5	Wash 4	0	2	800	2	30	50	☐
☑	6	Elution	5	5	100	2	120	50	☐
☑	5	End	0	1	800	2	0	0	☐

Geneaid Biotech Ltd.
16F, No. 112, Sec. 1, Sintai 5th Rd., Sijhih Dist, New Taipei City 221, Taiwan, R.O.C

Ver 05.10.22