For life science research only.
Not for use in diagnostic procedures.

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BehPrep Blood Extraction Kit

Small-Scale Preparations of DNA Isolation

Components

Catalog No.	50 preps	100 preps
LB Buffer	15ml	30ml
Prep Columns	50 pieces	100 pieces
Proteinase K	1 mL	2 mL
WB1 Buffer	30 ml	60 ml
WB2 Buffer	35 ml	60 ml
EB Buffer	5ml	10ml

Stored at room temperature

Expiration: 1 year

Equipment & Reagents to be supplied by user----------

- Pipets and pipet tips
- 1.5 ml Microtube
- Vortex
- Dry Heat Block/ Water Bath
- Micropipettors
- 70% ethanol (prepare fresh)
- 96-100% Isopropyl
- Nuclease-free water
- Microcentrifuge

*The Buffer LB contains guanidine hydrochloride, and should be handled with care. Guanidine hydrochloride forms highly reactive compounds when combined with bleach, thus care must be taken to properly dispose of any of this solution.

Precautions and Disclaimers----------

- This kit has been designed for research purposes only. It is not intended for human or diagnostic use.
- Avoid freeze/thaw cycles
- Mix well buffers before using

Description ----------

The Behprep blood DNA Extraction Kit was designed to purify genomic DNA from blood and buffy coat. Purification is based on spin column slica gel using Behprep's proprietary resin as the separation matrix. Behprep's slica binds DNA under high salt concentrations and releases the bound DNA under low salt and slightly alkali conditions. The purified genomic DNA is fully digestible with all restriction enzymes tested, and is completely compatible with PCR and Southern Blot analysis.

Specifications----------

- **High Yield**: up to 10 µg of Genomic DNA
- **High Quality DNA**: A260/A280 = 1.8-1.9
- **Sample:** 100 to 300 µl of whole blood and buffy coat (5 x 10^6 WBC)
- **Operation time:** within 25 minutes (manual)
- **Storage:** dry at room temperature (15-25ºC), Protease should be stored dry at 2-8ºC for extended periods.

Procedure ----------

Notes prior to use:

- Ensure that all solutions are at room temperature prior to use, and that no precipitates have formed. If necessary, warm the solutions and mix well until the solutions become clear again.

- Always vortex the Proteinase K before use.

- Prepare a working concentration of the Solution WB by adding 24 mL of 96 - 100 % ethanol (provided by the user) to the supplied bottle containing the concentrated Solution WB. This will give a final volume of 42 mL. The label on the bottle has a box that may be checked to indicate that the ethanol has been added.

- For best results, the use of whole blood collected into tubes containing an anticoagulant is highly recommended.

- Both fresh and frozen anticoagulated blood may be used with this procedure. Ensure that frozen blood is thawed at room temperature prior to starting the protocol.

- For blood containing Gram positive bacterial pathogens, prepare a 400 mg/mL stock solution (approximately 1.7 x 107 units/mL) of lysozyme as per supplier's instructions

Procedure :

1. Pipet 20 µl BEHGENE Protease into a 1.5 ml microcentrifuge tube. Add 250 µl sample. If the sample volume is less than 250 µl, add the appropriate volume of PBS. Add 250 µl BL Buffer. Mix thoroughly by vortexing, Briefly centrifuge the 1.5 ml microcentrifuge tube to remove drops from the lid and Incubate at 56°C for 12 min. Then add 250 µl ethanol (96–100%). Mix thoroughly by vortexing. Briefly centrifuge the tube to remove drops from the lid.

2. Pipet the mixture onto the BEHGENE Mini spin column (in a 2 ml collection tube) and centrifuge at 8000 rpm for 1 min. Discard the flow-through and collection tube.

Note: When preparing DNA from buffy coat or lymphocytes, centrifugation at full speed is recommended to avoid clogging.

3. Place the BEHGENE Mini spin column in a new 2 ml collection tube and add 600 µl WB1 Buffer. Centrifuge at 8000 rpm for 1 min. Discard the flow-through and collection tube.

4. Place the BEHGENE Mini spin column in a new 2 ml collection tube and add 700 µl WB2 Buffer. Centrifuge at full speed 14,000 rpm for 3 min. Discard the flow-through and collection tube.

8. Recommended: Place the BEHGENE Mini spin column in a new 2 ml collection tube (not provided) and centrifuge at full speed for 1 min. This eliminates the chance of possible Buffer WB2 carryover.

9. Place the BEHGENE Mini spin column in a new 1.5 ml microcentrifuge tube (not provided), add 200 µl EB Buffer (60 °C) or distilled water and incubate at room temperature (15–25°C) for 1 min. Centrifuge at 6000 x g (8000 rpm) for 1 min to elute the DNA.