Blood DNA Extraction Protocol

Important Notes:

- Wear gloves and lab coat when handling the buffers provided in this kit. They contain irritants.
- Do not add acidic solution or bleach directly to the sample preparation waste.
- The precipitates that appear during storage, especially at low temperature, in some buffers are easily dissolved by incubating the bottles at 60°C.
- Store Proteinase K at -20°C.
- Add 20ml absolute ethanol to Wash Buffer I and 40ml to Wash Buffer II.

* Set thermoblock or water bath at 65°C.
* Preheat Elution Buffer at 65°C.
* Make sure that ethanol has been added into wash buffers.

1- Pipette 200µl anticoagulated blood into a 1.5ml or 2ml microtube.

2- Add 200µl **Lysis Buffer** to the sample.

3- Add 10µl **Proteinase K** to the sample, mix thoroughly by vortexing, and incubate at 65°C for 15 min. Spin down briefly to remove any drops from inside of the lid.

4- Add 200µl of absolute ethanol to the sample and mix thoroughly by vortexing. Incubate for 1 min at room temperature. Spin down briefly to remove any drops from inside of the lid.

5-Transfer the mixture into the spin column placed in a collection tube. Centrifuge for 1 min at 10000 rpm. Discard flow-through.

6-Place the column into a new collection tube, add 500µl **Wash Buffer I**, centrifuge for 1 min at 10000 rpm. Discard flow-through.

7- Place the column in a new collection tube, add 500µl **Wash Buffer II**, centrifuge for 1 min at 10000 rpm. Then proceed centrifugation at full speed (14000 rpm) for 2-3 min to dry the membrane completely.

8- Place the column in a clean 1.5ml microtube. Open the lid of the column and apply 50-100µl preheated **Elution Buffer** to the center of the membrane.

9- Close the lid and incubate at 65°C for 2-5 min. Centrifuge at full speed (>12000rpm) for 1 min.

10- Store eluted DNA at -20°C.