GRS Genomic DNA Kit – Card

#GK25.0100 (100 preps) | GK25s (trial size, 4 preps)
(FOR RESEARCH ONLY)

PRIOR TO USE:

Check if Ethanol was added to Wash Buffer 2, water to Proteinase K and Elution Buffer to Carrier RNA. Then, for each sample to be processed, mix 1 µl of RNA Carrier Solution and 200 µl of Buffer C1 in a suitable RNase-free tube. Vortex briefly and keep at hand for step 2. Preheat Elution Buffer to 60°C.

SUGGESTED PROTOCOL FOR DNA PURIFICATION FROM SALIVA

1. Transfer 1-100µl of Saliva to a RNase/DNase-free 1.5ml microtube and add Buffer C2 to a final volume of 200 µl.

2. Add 20 µl of Proteinase K and 200µl of Buffer C1 (premixed with carrier RNA) and mix by vortexing. Incubate at 60°C for 10 minutes. (Mix every 2-3 minutes).

3. After incubation, add 200 µl of ethanol (96%-100%) and mix by shaking vigorously immediately for 10 seconds. In case precipitate appears, break it up by pipetting

4. Place the genomic DNA mini spin column in a 2-ml collection tube and transfer the sample mixture (including any precipitate if present) to the column. Centrifuge at 14,000g-16,000g for 2 minutes.

5. Discard the flow-through and place the spin column in a new 2-ml collection tube and add 400 µl Wash Buffer 1. Centrifuge for 30 seconds at 14,000g-16,000g and discard the flow-through.

6. Place the spin column back in the collection tube. Add 600 µl of Wash Buffer 2 (check if ethanol was added) Centrifuge for 30 seconds at 14,000g-16,000g and discard the flow-through.

7. Place the spin column back in the 2-ml collection tube and centrifuge for 3 minutes at 14,000g-16,000g to dry the column membrane completely and to get rid of trace amounts of ethanol. Discard flow-through and collection tube.

8. Remove the spin column carefully and place into a new 1.5-ml microtube.

9. Pipet 50µl Elution Buffer (pre-heated) directly to the center of the spin column without touching the membrane. Incubate at room temperature for 3 minutes.
   Notes: Instead of Elution Buffer, DNA can also be diluted with TE or water; pH should be 8.0-8.5. Standard elution volume is 50µl. Concentration can be increased by using less volume (30µl) or alternatively yield can be increased by using more volume (100µl).

10. Centrifuge for 1 minute at 14,000g-16,000g to elute purified genomic DNA. Discard the spin column and use DNA immediately or store at -20°C.