Tissue Genomic DNA Extraction Kit

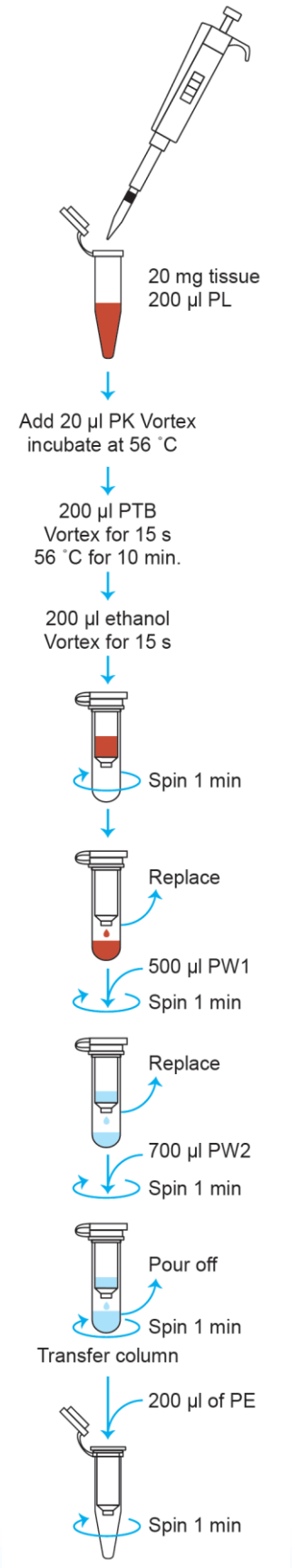
Catalog Number: NP041012110

Kit Contents:

Components	50 reactions
PL (Lysis Buffer)	12 ml
PB (Blood Binding Buffer)	12 ml
PW1 (Wash Buffer)	15 ml
PW2 (Wash Buffer	12 ml
PE (Elution Buffer)	12 ml
PK (PK Storage Buffer)	1 ml
Proteinase k	20 mg
Spin Column	50 pcs
Collection Tube	2 x 50 pcs

Before Starting

1. Add 10 ml of absolute ethanol to the PW1 (only at the first use).
2. Add 48 ml of absolute ethanol to the PW2 (only at the first use).
3. Add Proteinase K (PK) solution to the lyophilized powder of proteinase K and store at -20 ˚C until usage (only at the first use).
4. Check PW1, PL and PTB for salt precipitation. Redissolve any precipitation at 50 ˚C.
5. Preheat the solution of PE to 56 ˚C before starting the extraction process to enhance DNA extraction yield.



Protocol:

1. Transfer 20 mg of tissue (10 mg for liver or spleen) to a 1.5 ml tube and add 200 µl of PL solution. Cutting the tissue into the small pieces increases the yield of genomic DNA and reduces lysis incubation time.
2. Add 20 µl of Proteinase K and mix them well by vortexing and incubate at 56 ˚C until complete lysis (vortex occasionally). Lysis time varies depending on the tissue type.
3. After lysis of tissue, add 200 µl of PTB solution and vortex for 15 seconds and incubate at 56 ˚C for 10minutes.
4. Add 200 µl of absolute ethanol and mix by pulse-vortexing (15 s).
5. Carefully transfer lysate to the spin column. A quick spin before lysate transfer would be preferred if there was any debrises in the mixture. Spin column for 1 min at 13000 rpm.
6. Replace the collection tube with a new one.
7. Add 500 µl of PW1 into the column and spin for 1min at 13000 rpm.
8. Replace the collection tube with a new one.
9. Add 700 µl of PW2 into the column and spin for 1 min at 13000 rpm.
10. Pour off the flow-through of collection tube.
11. Repeat step 8 and 9 with 500 µl of PW2 (optional)
12. Spin for 2 min at 13,000 rpm to remove the remaining of the wash buffer. Transfer the spin column to a new 1.5 ml micro tube.
13. Add 200 µl of preheated PE, wait 3 min at room temperature or 57 ˚C (If you didn't warm PE). If you want more concentration add less PE (100 µl).
14. Spin for 1 min at 13000 rpm to elute DNA from the column. Store DNA solution at -20 ˚C.