

Cat#	Size
• I01-01-05	50 preps
• I01-01-10	100 preps
• I01-01-25	250 preps

A.B.T.[™] DNA Purification Kit

Description: A.B.T.[™] DNA Purification Kit is designed for sufficient and rapid isolation of high-quality genomic DNA from bacteria, fungi and different mammalian cell cultures, tissue samples and whole blood. The kit uses a silica-based spin column technology. The standard protocol takes about 20-25 minutes after cells are lysed. The isolated DNA can be used directly for PCR and enzymatic reactions. The amounts required for DNA isolation from different sources are shown in the table below.

Sample	Starting Amount	Yield (µg)
Whole Blood	200 ul	3-6
Blood (poultry, reptile)	10 ul	5-8
Tissue (liver, kidney, vs.)	10-20 mg	10-20
Tissue (spleen)	5 mg	25-30
Sperm	200 ul	3-6
Mouse Tail	0.5 cm	8-10
Hair	20-50 pieces	3-5
Bacteria	2×10 ⁹	8-10
Culture Cells	3×10 ⁶	8-10

Kit Components:

Components	I01-01-05	I01-01-10	I01-01-25
Proteinase K	0.6 ml	1.2 ml	3 ml
Extraction Buffer	15 ml	30 ml	75 ml
Binding Buffer (concentrated)	3 ml	6 ml	15 ml
Wash Buffer I (concentrated)	28 ml	56 ml	140 ml
Wash Buffer II (concentrated)	17 ml	34 ml	85 ml
Elution Buffer	15 ml	30 ml	75 ml
Spin Column	50 pcs	100 pcs	250 pcs
Collection Tube	50 pcs	100 pcs	250 pcs
Eppendorf Tube	50 pcs	100 pcs	250 pcs

Protocol: Before experiment;

- Prepare the water bath to 56°C
- Prepare absolute ethanol
- Equilibrate buffers to room temperature
- All centrifugation should be performed at room temperature
- If a precipitate has formed in buffer Binding Buffer, heat to dissolve at 56°C before use

1. Pipet 10 ul of Proteinase K, 200 ul whole blood and 200 ul Extraction Buffer into the bottom of a 1.5 ml tube, respectively. Vortex the tube to mix thoroughly.

2. Incubate at 56°C for 15 min. Spin down briefly to remove any drops from inside of the lid.

3. Add 210 ul of Binding Buffer to the mix, vortex to mix the sample thoroughly, and spin down briefly to remove any drops from inside of the lid.

4. Transfer the mixture to the spin column carefully, centrifuge for 1 min at 8,000 rpm. Discard the pass-through and reinsert the spin column back into the collection tube.

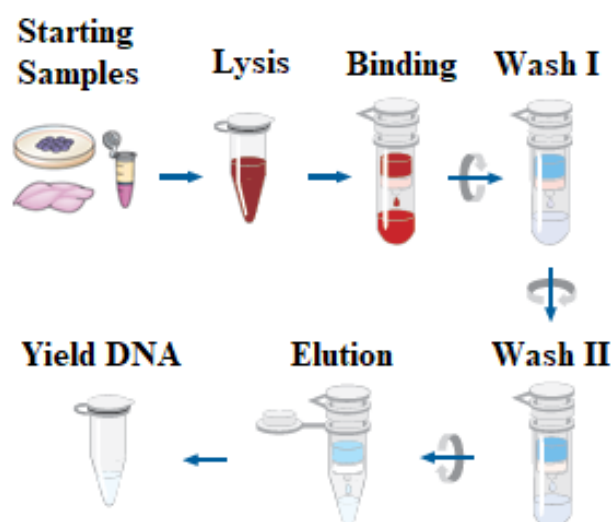
5. Add 650 ul of Wash Buffer I, centrifuge for 1 min at 8,000 rpm. Discard the pass-through and reinsert the spin column back into the collection tube.

6. Add 500 ul of Wash Buffer II, centrifuge for 1 min at 8,000 rpm. Discard the pass-through and reinsert the spin column back into the collection tube.

7. Add 250 ul of Wash Buffer II, centrifuge for 3 min at 14,000 rpm. Discard the pass-through and reinsert the spin column back into the collection tube.

8. Place the spin column in a fresh 1.5 ml tube. Add 200 ul of Elution Buffer. Incubate for 1 min at room temperature. Centrifuge at full speed for 1 min.

A.B.T.[™] DNA Purification Kit Brief Protocol



The yield and purity of DNA can be varied depending on the methods for harvesting and/or storing the starting sample materials. Freshly harvested sample should be used or stored immediately for best result. Note that the sample should be handled on ice as quickly as possible and repeated freezing and thawing of frozen sample should be avoided.