DNA Product Purification Kit

Cat: D1300
Size: 50T/100T
Storage: dry storage at room temperature, reinspection period is one year.

Kit Components:

Kit Components	50T	100T
Binding Buffer	30mL	60mL
Washing Buffer	15mL	2×15mL
Elution buffer	15mL	30mL
Adsorption Column	50 units	100 units
Collecting Tubes	50 units	100 units
Specification	1	1

Introduction:

This kit uses a unique centrifugal adsorption column to purify DNA fragments in the reaction liquid such as enzyme digestion and PCR, while removing impurities such as proteins, other organic compounds, inorganic salt ions and oligonucleotide primers. Using this kit, DNA fragments of 100bp-40kb size can be recovered with a recovery rate of more than 80%(the recovery rate of DNA fragments less than 100bp and larger than 10kb is 30-50%). The DNA recovered using this kit can be adapted for a variety of routine operations, including enzyme digestion, PCR, sequencing, library screening, linking and transformation tests.

Notes: Please read this note before using this kit.

1. This kit is suitable for non-selective recovery of all DNA fragments in solution(small fragments up to 50bp can be removed), for selective recovery of specific fragments while removing other fragments of different sizes, choose an agarose gel recovery kit.
2. The recovery rate is related to the initial amount of DNA and elution volume, and the lower the initial amount and elution volume, the lower the recovery rate.
3. When the DNA fragments less than 100bp and more than 10kb are recovered, the adsorption and elution time can be appropriately extended.

Protocols(only for reference):

*** Please add anhydrous ethanol to the washing buffer before use. Please refer to the label on the bottle to add the volume.**

1. Estimate the volume of PCR reaction liquid or enzyme digestion reaction liquid, add 4 times the volume of binding buffer to it, and mix thoroughly. If the PCR reaction system is 100μL, add 400μL binding buffer. If the volume of the reaction solution is small, it is recommended to dilute the reaction solution or enzyme cut reaction solution with water to 100μL, and then mix with 400μL binding buffer.

2. Add the solution obtained in the previous step into an adsorption column(the adsorption column is placed in the collection tube), place at room temperature for 2min, centrifuge at 12000rpm for 30-60s, dump the waste liquid in the collection tube, and put the adsorption column back into the collection tube. Note: The maximum volume of the adsorption column is 800μL. If the sample volume is greater than 800μL, it can be added in batches.
3. Add 600μL washing buffer to the adsorption column**(please check whether anhydrous ethanol has been added before use)**, centrifuge at 12000rpm for 30-60s, discard the waste liquid, and put the adsorption column into the collection tube.
4. Add 600μL washing buffer to the adsorption column, centrifuge at 12000rpm for 1min, discard the waste liquid, and put the adsorption column into the collection tube.
5. Centrifuge at 12000rpm for 2min to remove the bleaching solution as far as possible. Place the adsorption column open at room temperature or 50℃ in a temperature box for several minutes, in order to remove the residual washing buffer in the adsorption column and prevent the ethanol in the washing buffer from affecting the subsequent experiment.
6. Put the adsorption column into a clean centrifuge tube, drop 30-100μL of elution buffer preheated by 65-70℃ water bath into the center of the adsorption membrane, place at room temperature for 2min, centrifuge at 12000rpm for 2min, and collect DNA solution.

Notes:

(1) In order to increase recovery efficiency, the resulting collection liquid can be readded to the adsorption column and centrifuged again for 2min at 12000rpm.

(2) The volume of elution buffer should not be less than 30μL, and the volume is too small to affect the recovery efficiency.

(3) The pH value of the elution buffer has a great impact on the elution efficiency. If the eluent is made with water, it should be ensured that the pH value is between 7.0-8.5.

7. DNA products are stored at -20℃.

Related Products:

M1070	*D2000 plus DNA Ladder*
D1010	*6×DNA Loading Buffer*
T1060	*50×TAE buffer*
T1050	*5×TBE buffer*
G8142	*GoldView Type II Nucleic Acid stain(5000×)*
D1200	*Agarose Gel DNA Recovery Kit*