Nucleic Acid Extraction Kit (Magnetic Beads Method)

Plasmid DNA

Introduction:

Plasmid nucleic acid extraction kit (magnetic bead method) adopts magnetic bead and buffer system with unique separation function, combines magnetic nano-separation technology with SDS alkaline lysis method of bacterial cells, releases nucleic acid in the buffer system, and under the effect of centrifugal force The next cell debris and SDS complexes settle down. Add special coated magnetic beads, the magnetic beads have a strong affinity for plasmid DNA in the buffer system, and when the conditions change, the magnetic beads release the adsorbed nucleic acids, and the washing system can remove impurities such as proteins and small molecules in the solution. , can achieve the purpose of rapid separation and purification of nucleic acid, and does not use toxic reagents such as chloroform.

Application:

Widely used in scientific research, hospital, biological industry, etc.

Features:

①. Simple and fast: Ultrapure plasmid DNA can be obtained in about 45 minutes.

②. High purity: effectively remove impurities such as protein and inorganic salts, and the product A260/280 value is greater than 1.7.

③. Good quality: with a unique buffer, it can release DNA better and improve the yield, and it also has little damage to genomic DNA, which can protect the integrity of DNA.

④. Safe and non-toxic: the reagent does not contain toxic solvents such as phenol and chloroform.

⑤. Wide range of applications: enzyme digestion, PCR, library construction, Southern hybridization, etc.

Parameters:

Model	CH-13-1	CH-13-2	CH-13-3
Extraction Method	Magnetic bead method		
Sample Type	Bacterial liquid		
Validity Period	Good stability, valid for 12 months		
Sample Volume	1~2ml		
Within-assay Precision	Coefficient of variation (CV,%)≤15%		
Specification	16T/Kit, 32T/Kit, 64T/Kit	96T/Kit	50T/Kit
Applicable Instruments	BNP16, BNP32, BNP48, BK-HS32, BK-AutoHS96	BNP96, BK-HS96	Manual
Package Information	24 Kits/Carton (or 48 Kits/Carton)		
Package Size(W*D*H)	64T/Kit: 740*420*300mm; 96T/Kit: 740*420*300mm; 510*280*115mm (or 64T/Kit: 580mm*550mm*580mm; 96T/Kit: 580mm*550mm*580mm)		
Gross Weight	64T/Kit: 18.3kg; 96T/Kit: 28.4kg; 3.5kg (or 64T/Kit: 34kg; 96T/Kit: 41kg)		

Nucleic Acid Extraction Kit (Spin Column Method)

Spin Column

Introduction:

In this process, under specific buffer conditions, nucleic acids (DNA/RNA) specifically bind to silica or glass fiber membranes, while impurities such as proteins and polysaccharides are washed away. The purified nucleic acids are then eluted from the membrane, allowing for the extraction of high-purity DNA/RNA from samples. The extracted purified nucleic acids can be used in various common downstream experiments, such as enzyme digestion, reverse transcription, PCR, ligation, transformation, RT-PCR, library construction, sequencing, in vitro translation, and Southern blotting.

Application:

It is widely used in scientific research, medical diagnosis, animal husbandry, agriculture, bio-industry and public health.

Features:

①. High nucleic acid purity: The silica membrane specifically binds to nucleic acids under high salt conditions, efficiently removing proteins, polysaccharides, lipids, and PCR inhibitors.

②. No risk of cross-contamination: All steps are completed within the centrifuge column-collection tube system; waste liquid is passed through the membrane and discarded after each step via centrifugation.

③. No special equipment required: Only a standard benchtop centrifuge is needed.

Extraction Process:

Sample treatment with lysis buffer—nucleic acid binding to membrane—washing—elution of nucleic acid from membrane.

Advantages:

①. High concentration, high purity, and strong stability of extracted nucleic acids;

②. Convenient operation, no need for phenol-chloroform extraction, safe and environmentally friendly.

Parameters:

Item No.	Model	Specification	Applicable Sample Types	Nucleic Acid Types Extracted
DR1161	Z1	50T/Kit; 200T/Kit	Blood/cell/tissue samples	Genomic DNA
	Z2		Fresh or frozen plant tissues and plant cells	
	Z3		Various bacterial solutions	
	Z4		Animal tissues preserved at -80℃ or fresh, cultured cells, suspension cells	Total RNA
	Z5		Plants stored at -80℃ or fresh	
	Z6		Culture medium containing the target plasmid	Plasmid DNA
	Z7		Agarose gel containing the target nucleic acid fragment	Single-stranded, double-stranded, or circular DNA
Package Information		20 Kits/Carton (or 40 Kits/Carton)		
Package Size (W*D*H)		740*420*300mm (or 580*550*580mm)		
Gross Weight		10kg (or 18kg)		