

## Xmatrix Nucleic Acid Purification System (XNAPS)

*The latest generation of DNA/RNA purification kits*

### Advantages of XNAPS kits

**Fast process**  
**Toxic-free**  
**Ultra-pure**  
**High yield**  
**Low cost**

Xmatrix Nucleic Acid Purification System (XNAPS) is a novel platform that provides a simple, safe, and efficient technology for nucleic acid extraction and purification from any organism and source.

XNAPS platform was specifically developed to overcome the disadvantages of current purification technologies that use toxic chaotropic salts, reagents that are known to inhibit enzymatic reactions and present storage, shipping, and handling challenges. The purified nucleic acid free of chaotropic-residues exhibits improved activity in subsequent reactions. A series of XNAPS kits have been developed for applications requiring fast and easy preparation of highly pure DNA and RNA.

### Flow chart of XNAPS processing

XNAPS employs a simple “3-step system” to purify nucleic acid from various organisms. The starting materials may be in the form of liquid, solid, or a mixture of both.

**Step 1.** Lysis and denaturation.

**Step 2.** Binding and washing.

Step1 Organism lysis



Step 2-1 Specific binding of nucleic acid



Step 2-2 Washing away of impurities



Step 3 Elution of nucleic acid



# RENOGEN BIOLAB INC.

Advanced Technologies for Life Sciences

## Selection guide of XNAPS genomic DNA purification kits

Sample Source	XNAPS blood gDNA flexspin kit	XNAPS cell/tissue gDNA flexspin kit	XNAPS body fluid DNA flexspin kit	XNAPS stool DNA flexspin kit	XNAPS plant DNA flexspin kit	XNAPS soil DNA flexspin kit	XNAPS micro DNA flexbond kit
<b>Cat. No.</b>	NP1014A/B	NP1017A/B	NP1026A/B	NP1023A/B	NP1025A/B	NP1035A/B	NP1038
Whole blood	X	X					X
Buffy coat	X	X					X
Lymphocytes	X	X					X
Cultured cells	X	X					X
Animal tissues		X					X
Micro-dissected tissues		X					X
Paraffin-embedded tissue		X					X
Dried blood spot	X	X					X
Swabs		X					
Plasma			X				X
Serum			X				X
Saliva			X				X
Sputum			X				X
Urine			X				X
Cerebrospinal fluid			X				X
Stool				X			
Soil				X		X	
Plant							
Bacteria		X	X				X
Parasites		X	X				X
Viral DNA/RNA			X				X

### Selection Guide of XNAPS plasmid purification kits

Format	Applications	Volume scale	XNAPS plasmid flexspin kit	XNAPS plasmid endofree flexspin kit	XNAPS plasmid 96 flexspin kit
			NP1004A/B	NP1003A/B	NP1002A/B
Regular plasmid purification _manual	Enzyme digestion, sequencing, transformation	Mini	X	X	
		Midi	X	X	
		Maxi	X	X	
Endotoxin-free plasmid purification _manual	Transfection	Mini		X	
		Midi		X	
		Maxi		X	
Regular plasmid purification _high-through(96_well)	Enzyme digestion, sequencing, transformation				X

### Selection Guide of XNAPS RNA purification kits

Total RNA purification_manual	XNAPS RNA flexspin kit
	NP2001A/B
Animal whole blood	X
Animal tissues	X
Cultured cells	X
Plant tissues	X
Parasites	X
Bacteria	X
Yeast	X
Fungi	X

### Selection guide of DNA fragment purification

Sample	FastBack DNA minispin kit
	NP3001A/B
Agarose gel	X
PCR solution	X
Enzymatic digestion	X
Labeling solution	X