

# **GeneReady Praparation Kit User's Manual**

### Version: V-2.0

## **Product and Specification**

Using For	Code	Specification	Components
Plant PI	KP01-200	200T	Lysis Buffer B, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Plant PI	KP01-400	400T	Lysis Buffer B, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Plant PII	KP02-200	200T	Lysis Buffer B, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Plant PII	KP02-400	400T	Lysis Buffer B, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Plant PIII	KP03-200	200T	Lysis Buffer B, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Plant PIII	KP03-400	400T	Lysis Buffer B, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Plant PI (5ml)	PPK5-25	25T	Lysis Buffer B-II, 110ml $\times$ 1; Grinding Tube (5ml), 25T $\times$ 1
Plant PI (5ml)	PPK5-50	50T	Lysis Buffer B-II, 110ml $\times$ 2; Grinding Tube (5ml), 25T $\times$ 2
Plant PI (15ml)	PPK15-25	25T	Lysis Buffer B-II, 110ml $\times 2$ ; Grinding Tube (15ml), 25T $\times 1$
Plant PI (15ml)	PPK15-50	50T	Lysis Buffer B-II, 110ml $\times$ 4; Grinding Tube(15ml), 25T $\times$ 2
Animal Tissue PI	KT01-200	200T	Lysis Buffer A, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Animal Tissue PI	KT01-400	400T	Lysis Buffer A, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Animal Tissue PII	KT02-200	200T	Lysis Buffer A, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Animal Tissue PII	KT02-400	400T	Lysis Buffer A, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Animal Tissue PIII	KT03-200	200T	Lysis Buffer A, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Animal Tissue PIII	KT03-400	400T	Lysis Buffer A, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Microbe PI	KM01-200	200T	Lysis Buffer A, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Microbe PI	KM01-400	400T	Lysis Buffer A, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Microbe PII	KM02-200	200T	Lysis Buffer A, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Microbe PII	KM02-400	400T	Lysis Buffer A, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Microbe PIII	KM03-200	200T	Lysis Buffer A, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2
Microbe PIII	KM03-400	400T	Lysis Buffer A, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Animal Tissue PI (5ml)	APK5-25	25T	Lysis Buffer A-II, 110ml $\times$ 1; Grinding Tube (5ml), 25T $\times$ 1
Animal Tissue PI (5ml)	APK5-50	50T	Lysis Buffer A-II, 110ml $\times 2$ ; Grinding Tube (5ml), 25T $\times 2$
Animal Tissue PI (15ml)	APK15-25	25T	Lysis Buffer A-II, 110ml $\times 2$ ; Grinding Tube (15ml), 25T $\times 1$
Animal Tissue PI (15ml)	APK15-50	50T	Lysis Buffer A-II, 110ml $\times$ 4; Grinding Tube (15ml), 25T $\times$ 2
Microbe PI (5ml)	MPK5-25	25T	Lysis Buffer A-II, 110ml $\times$ 1; Grinding Tube (5ml), 25T $\times$ 1
Microbe PI (5ml)	MPK5-50	50T	Lysis Buffer A-II, 110ml $\times 2$ ; Grinding Tube (5ml), 25T $\times 2$
Microbe PI (15ml)	MPK15-25	25T	Lysis Buffer A-II, 110ml $\times 2$ ; Grinding Tube (15ml), 25T $\times 1$
Microbe PI (15ml)	MPK15-50	50T	Lysis Buffer A-II, 110ml $\times$ 4; Grinding Tube (15ml), 25T $\times$ 2
Plant RNA	KP11-200	200T	Lysis Buffer R, 50ml $\times$ 2; Grinding Tube, 100T $\times$ 2

RUO

Plant RNA	KP11-400	400T	Lysis Buffer R, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Animal Tissue RNA	KT11-200	200T	Lysis Buffer R, 50ml $\times 2$ ; Grinding Tube, 100T $\times 2$
Animal Tissue RNA	KT11-400	400T	Lysis Buffer R, 50ml $\times$ 4; Grinding Tube, 100T $\times$ 4
Microbe RNA	KM11-200	200T	Lysis Buffer R, 50ml $\times 2$ ; Tube, 100T $\times 2$
Microbe RNA	KM11-400	400T	Lysis Buffer R, 50ml $\times$ 4; Tube, 100T $\times$ 4
RNA (5ml)	RPK5-25	25T	Lysis Buffer RG1, 110ml $\times$ 1; Grinding Tube (5ml), 25T $\times$ 1
RNA (5ml)	RPK5-50	50T	Lysis Buffer RG1, 110ml $\times$ 2; Grinding Tube (5ml), 25T $\times$ 2
RNA (15ml)	RPK15-25	25T	Lysis Buffer RG1, 110ml $\times$ 2; Grinding Tube (15ml), 25T $\times$ 1
RNA (15ml)	RPK15-50	50T	Lysis Buffer RG1, 110ml $\times$ 4; Grinding Tube (15ml), 25T $\times$ 2
Microbe RNA (5ml)	MRPK5-25	25T	Lysis Buffer RG1, 110ml $\times$ 1; Grinding Tube (5ml), 25T $\times$ 1
Microbe RNA (5ml)	MRPK5-50	50T	Lysis Buffer RG1, 110ml $\times$ 2; Grinding Tube (5ml), 25T $\times$ 2
Microbe RNA (15ml)	MRPK15-25	25T	Lysis Buffer RG1, 50ml $\times$ 2; Grinding Tube (15ml), 25T $\times$ 1
Microbe RNA (15ml)	MRPK15-50	50T	Lysis Buffer RG1, 50ml $\times$ 4; Grinding Tube (15ml), 25T $\times$ 2

#### **Storage Conditions**

Store the GeneReady praparation Kit at room temperature . See product label for expiration date.

#### Introduction

The GeneReady praparation kit is designed to sample preparation for isolation of nucleic acid from various tissue, such as rice leaves, animal tissues, feces, cultured cells, etc. It is based on a easy process as following. Homogenize the microbes by high speed grinding with particles and lysis buffer. Then centrifuge the mixture to isolate the components for further analyses and experiments.

#### Materials to Be Supplied by the User

Nucleic acid extraction kits sterile centrifuge tubes

#### Important

If Lysis Buffer has precipitated while storage, please incubate the buffer at 37°C water bath until the precipitate fully dissolves. Blending the buffer before use.

#### Protocol

1. Add samples and Lysis Buffer A/B/R/A-II/B-II/RG1 to the Grinding tube as the following table. We suggest to add the sample first, and then add Lysis Buffer A/B/R/A-II/B-II/RG1. If necessary, please add the proteinase according to request of the nucleic acid extraction kit.

For efficiently lyses, we suggest to cut the samples into small pieces (<5mm).

Sample Type	Grinding Tube Volume	Samples	Lysis Buffer Adding Amounts
Tissue of Plant And	2ml	≤100mg	400µl
Animal	5ml	≤250mg	1ml

		15ml	≤750mg	4ml
Microbe	Solid Samples (like as feces)	2ml	≤25mg	400µl
		5ml	≤62.5mg	1ml
		15ml	≤187.5mg	4ml
	Liquid Samples	2ml	≤100µl	400µl
	(like culture	5ml	≪250µl	1ml
	fluid)	15ml	≪750µl	4ml

- 2. Put the Grinding Tube into the rotor of instrument, and make sure the cover is locked. Please note the balance of tubes before run.
- 3. Program to homogenize the samples for 30-300S at a speed of 6.5 m/s and then run. Nucleic acid will be released during this process.

You may adjust the program based on different kinds of samples.

4. Centrifuge the tube at a speed 5,000~6,000g for 5 minutes, and pipet of supernatant into a fresh tube. The tube can be used for further analyses and experiments immediately.

Optional extraction method include spin column, Magnetic beads, phenol chloroform method etc.

#### Troubleshooting

1. Grinding incompletely

For some hard samples, please set higher speed and longer running time. Using GeneReady Ultracool or GeneReady Ultimate to keep sample under low temperature during running, which can protect the samples from degradation.

2. Abnormal sound during running

Stop and ensure that the Grinding Tubes are well balanced in the symmetric positions.

#### Manufacturer:

Hangzhou Lifereal Biotechnology Co., Ltd.

Address: Room1-101, 2-201 & 3-302, Building No.2, No. 16 Xianqiao Road, Zhongtai street, Yuhang district, Hangzhou, China. Manufacturer contact: +86-571-88733231

After-sales service contact: +86-571-89170228

Email: (Overseas) overseas1@lifereal.com.cn

(Domestic) <u>info@lifereal.com.cn</u>