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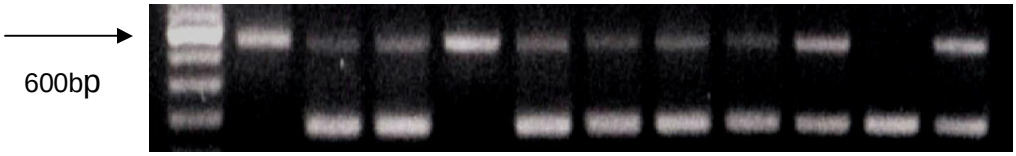
10 Minute DNA Release Kit-2

(30 Minutes Pure DNA kit) **(Cat# JZ-002)**

Description

This Kit was designed by taking 30 minutes processing to obtain pure DNA from mice tail or any tissue. The purified DNA (260/280=1.7-2.2) is widely used **for Southern blot or PCR on the genotyping of transgenic mice**, and also used for DNA Methylation, Gene Chip, DNA Arrays, etc.
At present, there are not any products like this Kit by taking 30 min. to obtain purified DNA from mice tail or any tissue. The purified DNA Extract works well for transgenic mice of the single and multi-gene and to have good expression easily (**Fig. below**) in PCR reaction.

Genotyping the P53 transgenic mouse
With 10 Minutes DNA Release Kit-2



The expression of P53 +/+ at number 1, 4;
P53 +/- at number 2, 3, 5, 6, 7, 8, 9, 11;
P53 -/ - at number 10;

Kit-2 work **Tools:**

- Thermo-machine or water bath which can be set up the temperature to be 90-95˚ C;
- Centrifuge with 10,000 – 15,000g setting up at room temperature;
- 1.5ml eppendorf tubes, tips, and micro (10-200ul scalar) pipette;
- Vortex or mixture machine that is optional (referring to process in Step #3);
- Below reagents that is not included in the Kit, that are provided by yourself
    - Isopropanol (2-Propanol), molecular biology grade, minimum 99%;
    - 70 % alcohol.
    - 0.1 x TE buffer that is made by mixing 1/10 of 1x TE and 9/10 of distilled water.

Kit-2 Content Table

Catalog Number	DNA Release Buffer		Samples	Storage & Use	Price($)
	Name	Volume			
JZ-002	Kit2-B1	13.5ml	100	To kept at at 5˚-29° C. Work well for 1 year from open day **Alarming!** The below 5° C is not allowed	66.90/kit
	Kit2-B2	1.5 ml			
	Kit2-B3	6 ml			

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Kit-2 Protocol Table

Step	Action	Example
Step 1	• Place a mice tail 6-8 mm or any tissue*6-20mg into an eppendorf tube with **Kit2-B1,135ul** and **Kit2-B2,15ul ,** mix it well and to be capped. * it is better to cut the tail or tissue to be a few piece.	**Ex. #1** 
Step 2	• Incubate the tube at 95˚ C (no shaking) for 10 minutes. (15-25 minute is also allowed for older mice tail).	
Step 3	• Flick the tube for 3-5 times, or vortex it 2-3 Seconds, then add 60ul of **Kit2-B3**. Vortex it 2-3 seconds and incubate it at room temperature (RT) For 2 minutes.	
Step 4	• Centrifuge it at 15,000x g for 3 min. at RT. • Transfer supernatant 170-180 ul to a fresh tube, then add 150ul of **Isopropanol** (2-propanol), invert the tube for 6-9 times and to be at RT for 2 minutes,	**Ex. #2** 
Step 5	• Centrifuge at 15,000x g for 3 min. at RT. The DNA pellet should be seen in bottom of the tube.	
Step 6	• Be careful to remove the supernatant. • Add 1 ml of **70% alcohol** to the tube by inverting it 4-6 times to wash the DNA pellet. • Centrifuge the tube at 10,000x g for 2 minutes at RT.	
Step 7	• Decant the 70% alcohol • To dry the DNA pellet for 2-3 min. at RT, (see Ex #2).	
Step 8	• Add 20-50ul of **0.1X TE buffer** to dissolve the ready DNA pellet at RT For 4-5 minutes. • Flick the tube for 6-8 times. The purified DNA would be dissolved well.	
Step 9	• Measure the DNA concentration to be used for any what you want. • It is unnecessary to measure the DNA concentration if the DNA is used for PCR only. Usually, to dilute the DNA extract 10-20 times with 0.1x TE buffer. Take 1-2ul as the templet in 20-25ul reaction volume to run PCR. • Store the DNA at 4˚ C for a few weeks and at -20˚ C for longer using,	

Reference:

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3. Ren S et al. ;A Simplified Method to Prepare PCR Template DNA for Screening Of Transgenic and knockout Mice. Contemp Top Lab Anim Sci.2001: 40(2): 27-30.
4. Hofstetter JR et al.; A Comparison of Recovery Methods and Tissue Sources. Biochem Mol Med. 1997; 62(2); 197-202.
5. Malumbres M et al. Isolation of High Molecular Weight DNA for Reliable Genotyping of Transgenic Mice. Bio Techniques 1997; 22(6): 1114-1119.
6. Anderson S et al.; Sequence and organization of human mitochondrial genome, Nature, 1981; 290(9):457-465.

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