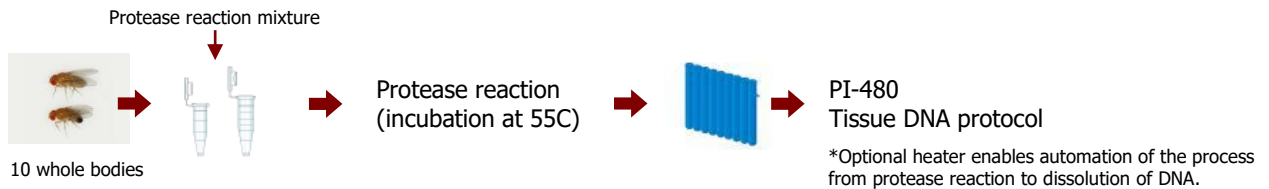


PI-480 Tissue DNA protocol

Genomic DNA isolation from protease K digested Drosophila



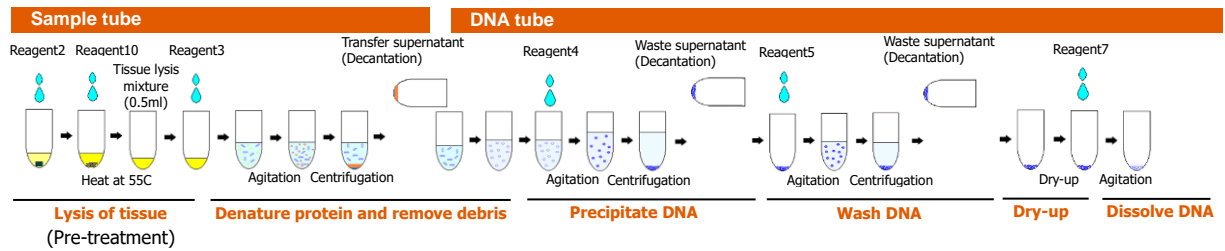
KURABO PI-480 is an automated DNA isolation system with throughput of 48 samples at a time. This data sheet shows an example of DNA isolation from protease digested Drosophila. The specially designed 8-hole tube makes isolation process easy.



Experiment

Sample	Protease K digested Drosophila								
Sample amount	Drosophila: 10 whole bodies /sample								
Isolation system and protocol	PI-480 Tissue DNA protocol								
Reagents kit and consumables	NR-201 Sample tube, PT-8000; DNA tube, NT-8000								
Chemical principle	Lysis of tissue: Protease K digestion (pre-treatment) Purification: Phenol extraction DNA isolation: Precipitation by alcohol								
Process	<p>Pre-treatment: Digest with 0.2mg/ml of protease K at 50-55C for 1hr. Reaction component is as follow;</p> <table border="0" style="margin-left: 40px;"> <tr> <td>0.25ml</td> <td>0.4mg/ml protease K in Protease dissolving reagent (No.2, NR-2025)</td> </tr> <tr> <td>0.25ml</td> <td>Suspending reagent (No. 10, NR-10025)</td> </tr> <tr> <td colspan="2"><hr/></td> </tr> <tr> <td colspan="2">Total volume 0.5ml</td> </tr> </table> <p>DNA isolation with PI-480: Step1. Denature protein and remove debris Step2. Precipitate DNA Step3. Wash DNA Step4. Dry up Step5. Dissolve DNA in DNA dissolving reagent (KURABO, NR-7025) Final volume 100ul</p>	0.25ml	0.4mg/ml protease K in Protease dissolving reagent (No.2, NR-2025)	0.25ml	Suspending reagent (No. 10, NR-10025)	<hr/>		Total volume 0.5ml	
0.25ml	0.4mg/ml protease K in Protease dissolving reagent (No.2, NR-2025)								
0.25ml	Suspending reagent (No. 10, NR-10025)								
<hr/>									
Total volume 0.5ml									

Workflow of Tissue DNA protocol



Processing time 48 samples: 2.7hr
(PI-480) 48 samples: 2.1hr with optional heater unit.

Analysis methods

Yield and purity calculation Absorbance of 260nm was measured for each DNA solution by spectrometer.
 DNA yield was measured by picogreen reagent

DNA purity was evaluated by the ratio of A260/A280.

Electrophoresis Each 8 μ l of DNA solution was loaded on a 0.7% agarose gel.

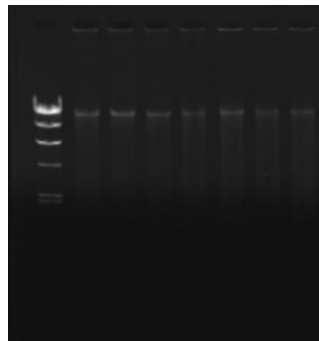
Results

Yield and purity

Sample	Yield (μ g)	Purity (A260/A280)	Purity (A260/A230)
	2.8~4.5	2.1~2.2	2.2

Yield : DNA : measured by picogreen

Electrophoresis



Each 8 μ l of 100 μ l DNAsolution isolated from Drosophila.

The starting amount is;
 10 Drosophila whole body

M : λ HindIII size maker

1~7 : Drosophila DNA

Ordering information

DNA isolation system PI-480
Tissue DNA protocol

Reagents kit Tissue DNA isolation reagents kit NR-201 (approx. for 650 preps)

Reagent name	Reagent No. (Code)	Content
Proteinase dissolving reagent	2 (NR-2025)	1
Deproteinization reagent	3 (NR-3025)	1
Precipitating reagent	4 (NR-4050)	1
Washing reagent	5 (NR-5050)	3
DNA dissolving reagent	7 (NR-7025)	1
Suspending reagent	10 (NR-10025)	1

Processing tube Sample tube: PT-8000 (8-hole, blue, 64pieces)

DNA tube: NT-8000 (8-hole, white, 64pieces)

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