

Grind-N-Go DNA Extraction Set

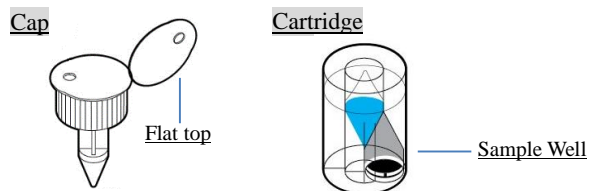
50 tests/set (cat no.: agng-dna)

For research use only.

Intended Use

Grind-N-Go DNA Extraction Set is intended to be used to rapidly extract genomic DNA from various sample types. The extraction set is a simple one-tube protocol based on NaOH method to achieve DNA extraction in simple steps. Grind-N-Go DNA Extraction Set's compact, easy-to-use design enables users to easily prepare DNA for downstream DNA amplification on iiPCR system for point-of-need detection of biological materials.

Components



Note: Sample Well is already inside the Cartridge.

Note: Do not reuse any components.

Note: Avoid direct contact with the chemicals.

Shipping & Storage Condition

Note: Please conduct a quality check of materials, upon receiving the shipment. Do not use any damaged products.

When kept dry at room temperature, all reagents are stable until the expiration date labeled on the box. Deliver and store all components at room temperature.

Sample Type

The sample types for extraction can be one of the following:

Note: Using fresh sample for extraction is recommended.

● Solid sample

A. Shrimp tissue

Sample type	Sample size
Post larvae (PL)	<PL6 : 25-50 PLs; PL6 to PL15 : 10-30 PLs
Fantail	Shrimp 1-2 cm : 10 pieces; Shrimp 2-4 cm : 5 pieces
Pleopod	Shrimp 4-7 cm : 10 pieces; Shrimp 7-10 cm : 3 pieces; Shrimp 10-15 cm : 1 piece; Shrimp 15-20 cm : 1/3 pleopod
Mid-gut	1 cm
Fecal Sample	1 cm

Note: Hepatopancrease and stomach are not recommended for Grind-N-Go DNA extraction.

B. Plant

Sample type	Sample size
Soybean seed coat or embryo (Soak seeds in water >5 minutes until the seed coat and embryo can be easily peeled off.)	1 piece
Processed soy product (Fried food: Pre-soak the sample in water until it is soft.)	The size of a grain of rice

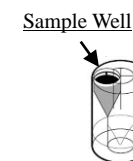
● Swab sample

A. Fish (For KHV detection)

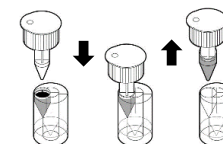
Sample type	Sample size
Mucosal swab	1. Moisten a sterilized cotton swab (cotton diameter ≤ 0.5 cm) with PBS. 2. Use it to smear the surface of dorsal fin to collect skin mucus of fish.

Procedure I (for solid sample)

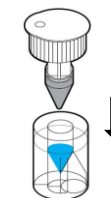
1. Load sample into the sample well located at the bottom of the cartridge. (For sample size, please refer to Sample Type section.)



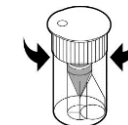
2. Place the grinder into the sample well, press down and twist 90 degree to lock grinder and sample well together. Pull the grinder/sample well complex out from the cartridge.



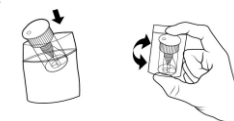
3. Flip the cartridge, and push the pointy end of grinder/sample well through the sealing film of the cartridge. Once the complex is inside, fit the cap on top of the cartridge and press it down until you hear a clicking sound.



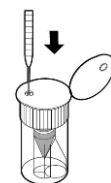
4. While maintaining the cartridge in a vertical position, twist the cap back and forth at least 10 times (>20 clicking sounds) to grind the sample.



5. Place the cartridge into a ziplock bag. While pressing the cap firmly, shake the cartridge several times to mix sample with the extraction solution until the solution becomes colorless.

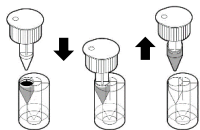


6. DNA is now in the solution and ready for downstream analysis. Open the flap top on the cap to reveal the hole. Use the inoculating loop to transfer DNA extract through the hole.

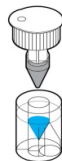


Procedure II (for swab sample)

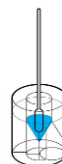
1. Place the grinder into the sample well, press down and twist 90 degree to lock grinder and sample well together. Pull the grinder/sample well complex out from the cartridge.



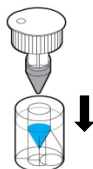
2. Flip the cartridge. Poke a hole in the sealing film of inner circle with the pointy end of grinder/sample well complex. **Do not** push the grinder/sample well complex all the way in.



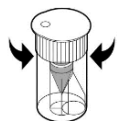
3. Insert the swab (through the hole from Step 2) into the blue solution and swirl the swab in the solution for 30 seconds. Discard the swab.



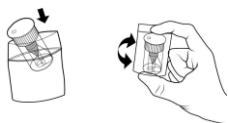
4. Cap the cartridge with the grinder/sample well complex, and press it all the way down until you hear a clicking sound.



5. While maintaining the cartridge in a vertical position, twist the cap back and forth at least 10 times (>20 clicking sounds) to grind the sample.



6. Place the cartridge into a ziplock bag. While pressing the cap firmly, shake the cartridge several times to mix sample with the extraction solution until the solution becomes colorless.



7. DNA is now in the solution and ready for downstream analysis. Open the flap top on the cap to reveal the hole. Use the inoculating loop to transfer DNA extract through the hole.

