



PlantOpsis™ DirectPCR-A

(NOT FOR RESALE)

INTENDED USE

Research Use Only (RUO) – not to be used for veterinary or clinical applications

PlantOpsis™ DirectPCR-A is intended for extraction-free amplification of nucleic acids from compatible plant samples.

PRINCIPLES OF THE PROCEDURE

PlantOpsis™ DirectPCR-A is engineered to simultaneously bind a variety of PCR inhibitors found in plant samples, lyse microorganisms / plant cells and stabilize RNA and DNA in a manner that's compatible with PCR. The product consists of a proprietary mixture of peptides, salts, stabilizers, sequestering molecules, and buffers to achieve these tasks. DirectPCR-A allows for extraction-free amplification of compatible plant samples without performing nucleic acid isolation, centrifugations or other sample manipulations, which may introduce errors, contaminants and/or skew the representation of nucleic acid fragments.

User should verify the applicability of PlantOpsis™ DirectPCR-A for desired applications.

EXTRACTION-FREE PROTOCOL

1. Thoroughly mix PlantOpsis™ DirectPCR-A to ensure homogeneity, but avoid creating bubbles unnecessarily
 1. DirectPCR-A has a hazy, white color when homogenized and normal settlement occurs if not regularly mixed
2. Add 50 ~ 200 µL of PlantOpsis™ DirectPCR-A into a small, plastic tube (e.g., 1.5 mL tube)
 1. The volume of reagent will depend on the size of your sample and type of sample
3. Place leaf punch (4~6 mm diameter) into tube with reagent
 1. OPTIONAL: Thoroughly crush the plant sample in PlantOpsis™ DirectPCR-A with a clean, blunt object (e.g., micropestle). This may improve or hinder amplification of your target gene region.
4. Heat the sample at 80~95°C for 10~15 minutes and let cool at room temperature for ~10 seconds before continuing
 1. The sample can be heated by placing the tube in hot water or using a heating block, thermal cycler, or oven
5. Use processed sample in your desired PCR application
 1. Processed sample should represent 10% ~ 40% of your final PCR mixture

STORAGE OF PlantOpsis™ DirectPCR-A

PlantOpsis™ DirectPCR-A is ready for use and no further preparation is necessary. The product should be transported and stored in its original container at 4–25°C until used. Do not overheat. Do not freeze reagent. If ice crystals are observed, then bring reagent to room



temperature before use. Improper storage may result in a loss of efficacy. Do not use after expiration date, which is clearly indicated on the bottle.

AVAILABILITY – NOT FOR RESALE

| Cat. # | Description |
|---------|-----------------------------------|
| 732025 | PlantOpsis™ DirectPCR-A , 25 mL |
| 732100 | PlantOpsis™ DirectPCR-A , 100 mL |
| 7321000 | PlantOpsis™ DirectPCR-A , 1000 mL |

MANUFACTURER

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