



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 plant sample into tube with reagent
4. Thoroughly crush the plant sample in PlantOpsis™ DirectPCR-A with a clean, blunt object (e.g., pellet pestle)
5. Heat the crushed 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
6. Use processed sample in your desired PCR application
 1. Processed sample can represent ~50% of your final PCR mixture (i.e., ~ 10 µL sample into a total volume of 20 µL)

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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