CTAB Extraction Buffer

(Molecular Biology Grade)

Ordering info

TBB0950-500, 500 mL

TBB0950-1000, 1000 mL

Description

CTAB Extraction Buffer is a ready-to-use lysis buffer designed for the isolation of genomic DNA from plant tissues and other polysaccharide-rich samples. CTAB is a cationic detergent widely used in plant DNA extraction protocols because it efficiently disrupts cellular membranes and facilitates the separation of DNA from polysaccharides and other contaminants.

The high salt concentration promotes polysaccharide removal while maintaining DNA in solution. The resulting lysate can be further purified by precipitation, organic extraction, spin columns, or other compatible DNA purification methods.

Composition:

CTAB: 20 g/L (2% w/v)
EDTA: 20 mM
NaCl: 1.4 M
Tris: 100 mM
pH (20°C): 8.0

Features

- Sterile.
- Helps reduce polysaccharide contamination during DNA extraction.
- Suitable for a wide range of plant tissues.

Applications

- Genomic DNA extraction from plant tissues.
- DNA isolation from polysaccharide-rich samples.
- Preparation of DNA for PCR, qPCR, genotyping and sequencing.

Storage

CTAB Extraction Buffer is shipped at room temperature. Store at room temperature.

CTAB will precipitate when exposed to cold temperatures, if this is the case, heat up the buffer to 37°C and the precipitate will dissolve.

Quality Control

Nuclease-free.

Suggested Protocol

1. Homogenize 50–100 mg of plant tissue and add 500–700 µL of CTAB Extraction Buffer.
2. Incubate at 65 °C for 10–20 min, mixing occasionally.
3. Centrifuge at high speed for 5–10 min to remove insoluble material.
4. Transfer the supernatant to a new tube and proceed with the preferred DNA purification method, such as organic extraction, alcohol precipitation, or silica-based purification.
5. Resuspend or elute the purified DNA in an appropriate buffer or nuclease-free water.

Alternative Method for Plant DNA Isolation

The Tiaris High-Q™ Spin-Column Plant DNA Purification Kit uses a modified CTAB-based lysis system optimized for silica-membrane spin columns. This approach eliminates the need for the chloroform extraction steps traditionally associated with CTAB-based methods and provides a simple and rapid workflow for the purification of high-quality DNA from a wide range of plant tissues.