

Pectinase Extraction Reagent

Cat. No.: P1509593 | Pack size: 500 mL | Storage: Room temperature

Overview

Natural pectin substances exist widely in fruits, roots, stems and leaves of plants in the forms of protopectin, pectin and pectic acid. They are components of plant cell walls, existing together with cellulose and forming the intercellular cement between adjacent cells, which tightly binds plant tissue cells together. Pectinase is a general term for a class of enzymes that decompose pectin substances, essentially polygalacturonase hydrolase. It includes four major categories: protopectinase, pectinesterase, polygalacturonase and pectin lyase. Pectinase is widely found in plant fruits and microorganisms, and is mainly used in food, wine-making, environmental protection, medicine, textile and daily chemical industries.

This Pectinase Extraction Reagent is mainly used for extracting pectinase from plant tissues or fruits. 500 ml of the reagent can be used for approximately 160 sample extractions. Note: This reagent is intended for research purposes only and not for clinical diagnosis or any other applications.

Key Features

- ☐ Ready-to-use reagent or supplement formulation for the indicated research workflow.
- ☐ Designed for Cell fractionation, Cell lysis & Protein extraction workflows.
- ☐ Storage condition: Room temperature.

Kit Contents & Storage

Cat. No.	Component	Size	Storage
P1509593	Pectinase Extraction Reagent	500 mL	Room temperature

Storage: Room temperature.

Shipped in: Normal.

Materials Required But Not Supplied

Item	Recommended Specification	Purpose
Distilled water	User-prepared	Required for use
Experimental materials: Fruits such as peaches, plums, apples and apricots, or other plant tissues	User-prepared	Required for use

Item	Recommended Specification	Purpose
Electronic balance, fruit knife or scissors, mortar or homogenizer, test tubes or centrifuge tubes, centrifuge	User-prepared	Required for use

Specifications

Attribute	Value
Application	Cell fractionation, Cell lysis & Protein extraction
Shipped In	Normal
Specifications & Purity	BioReagent, Suitable for plant cell and tissue extracts
Stability And Storage	Store at room temperature long term (24 months).
Storage	Room temperature

Protocol

1. Take the fruits or other plant tissues, rinse them thoroughly, dry them, weigh 3 g of the cut fresh samples, and place them in a mortar or homogenizer pre-cooled at 4°C in advance.
2. Add 3 ml of the Pectinase Extraction Reagent pre-cooled at 4°C, grind or homogenize the mixture fully, and then transfer it into a centrifuge tube or test tube.
3. Centrifuge the mixture at 10000 g for 10 min at 4°C, and collect the supernatant, which is the crude pectinase extract.

Sample Handling

Use clean or sterile containers and consumables appropriate for the intended workflow. Bring reagents to the working condition recommended in the protocol or laboratory method before use.

Avoid repeated contamination, unnecessary freeze-thaw cycles, or prolonged exposure to room temperature unless the product label specifically permits it.

Safety & Precautions

1. The Pectinase Extraction Reagent should be stored in a sealed container to avoid volatilization of active ingredients.
2. Please use the reagent as soon as possible after opening to prevent affecting the subsequent experimental results.
3. For your safety and health, wear a lab coat and disposable gloves during operation.
4. Read the current SDS before use. Wear lab coat, gloves, and eye protection. Handle reagents according to local laboratory safety and EHS procedures.
5. Use clean or sterile consumables as required by the application and avoid contamination during handling.
6. Follow the storage condition on the product label. Protect from light or freezing where specified.

Quality Control

QC Item	Method	Acceptable Range
Appearance	Visual inspection	Clear or expected appearance without leakage, contamination, or abnormal precipitate
Application performance	Representative staining, coating, extraction, or culture workflow	Result is consistent with the product description and lot-specific specification
Storage condition verification	Receipt and storage review	Stored according to product label and protected from light where required

Troubleshooting

Issue	Possible Causes	Corrective Action
Weak or uneven result	• Insufficient sample preparation • Incorrect incubation time or temperature • Reagent stored improperly	• Prepare sample according to protocol • Optimize incubation within recommended range • Verify storage condition and expiry/COA
Background or nonspecific staining/effect	• Incomplete washing or deparaffinization • Over-treatment or over-oxidation • Contaminated water or containers	• Wash thoroughly and prepare sections completely • Shorten treatment time as needed • Use clean containers and fresh water

Issue	Possible Causes	Corrective Action
Product deterioration after opening	• Exposure to air/light or contamination • Repeated temperature cycling	• Keep container sealed and protected from light where required • Use aseptic technique and avoid repeated temperature changes

Recommended Applications

Cell fractionation, Cell lysis & Protein extraction.

Contact & Global Offices

Whether you have a technical question, need help with a quotation, or want to inquire about an order, our regional teams are ready to assist. Please contact the office for your region; for general inquiries, the North American office is the corporate primary.

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Limitations & Disclaimer

- ☐ For Research Use Only (RUO). Not for use in human or animal diagnostics, therapeutics, or in vivo applications. Not for food, cosmetic, or household use.
- ☐ This product is not a CE-marked in vitro diagnostic device under IVDR (EU) 2017/746 and is not an FDA-cleared device under 21 CFR. Use is restricted to verified businesses, institutions, and qualified professionals for research and development purposes.
- ☐ Where any kit component is classified as hazardous under CLP (EC) 1272/2008 or OSHA HCS (29 CFR 1910.1200), the product Safety Data Sheet (SDS) takes precedence over this document for handling, storage, and disposal information.
- ☐ Performance depends on sample type, sample condition, handling, and operator technique. Users are responsible for validating the product for their specific application.
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