

Datasheet

Trypsin Inhibitor

Cell Culture Reagent

Product	Description	Catalogue-No.	Size
Trypsin Inhibitor	Trypsin neutralizing solution	P10-033100	100 ml

Product description

Trypsin Inhibitor is a sterile solution of plant bases inhibitors against trypsin and in some effect to chymotrypsin and plasmin. The Inhibitor solution is does not inhibit metalloproteases, tissue based kallikrein, and acid or thioproteases.

Storage conditions

Storage: -20°C
Stability: 2 years from date of production
Size: 100 ml, other sizes on request

Repeated freezing and thawing will reduce activity and should be avoided. Thawed Trypsin Inhibitor can be stored at 2-8°C for short terms.

Composition

Trypsin Inhibitor solution contains natural plant based protease inhibitor proteins. The biological activity is depending on Trypsin concentration.

Suitability

For inhibiting Trypsin activity in serum-free culture of adherent cells.

Trypsin is used for dissociation of adhesion-dependent cells. Serum contains natural trypsin inhibitors. In serum-free cell culture the neutralizing effect of serum is absent. Therefore, it is crucial to completely block proteolytic activity from Trypsin after detachment of the cells. In addition, Trypsin Inhibitor supports recovery, adhesion and spreading of the trypsinized cells in new culture vessels.

Inhibits Trypsin activity; Chymotrypsin and other proteolytic enzymes are inhibited to a lesser extent.

Special advantages

Trypsin Inhibitor contains protease inhibitors as well as growth promoting agents. After detachment of the cells and re-suspension in serum-free medium Trypsin Inhibitor supports the recovery, attachment and spreading of the cells. The usual centrifugation step to remove Trypsin inhibitor from the cells should be omitted with this product. This is saving time and facilitates a more convenient and efficient serum-free cell culture.

Please follow instructions for use closely to take advantage of this unique feature.

Instructions for use

Use sterile cell culture technique when handling this solution.

- Use adherent cells in the log phase of the culture
- Remove spent medium with a pipette and discard
- Rinse the cell layer with DPBS (without Mg^{2+}/Ca^{2+})
- Cover cell layer with Trypsin/EDTA (0.25%, 0.02%) (about 1 ml per T25 flask)
- Remove Trypsin after about 1 minute
- Depending on the cell type it may be necessary to incubate at 37°C (or lower temperature for more sensitive cells)
- Tap flask gently and check in a microscope that all cells are detached
- Add 1 ml Trypsin Inhibitor solution to 25 cm² area (adjust volume accordingly, usually 1 ml Trypsin Inhibitor per ml Trypsin)
- Do not remove Trypsin Inhibitor
- Resuspend cells in serum-free culture medium and count
- Distribute cells in new culture vessels at desired cell density
- Follow routine cell culture procedure

Please Note

Cell exposure to Trypsin solution should be as brief as possible. Overexposure to Trypsin can damage cells. Cell cultures under serum-free conditions in general detach more readily and are more sensitive to Trypsin. Failure to neutralize Trypsin may result in a loss of the culture.

Technical support

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

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