

Product Information

Lyticase from *Arthrobacter luteus*

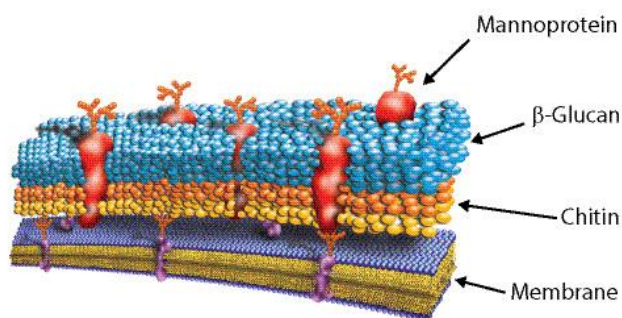
Catalog Number **L4025**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

CAS RN 37340-57-1

Product Description

Yeast cells are difficult to disrupt because the cell walls may form capsules or resistant spores. DNA can be extracted from yeast by using lysing enzymes such as lyticase, chitinase, zymolase, and gluculase to induce partial spheroplast formation. Spheroplasts are subsequently lysed to release DNA. Lyticase is preferred to digest cell walls of yeast and generate spheroplasts from fungi for transformation.¹



Lyticase contains β -(1 \rightarrow 3)-glucan laminaripentaohydrolase with additional β -(1 \rightarrow 3)-glucanase, protease, and mannanase activities.^{1,2} For isolation of nucleic acids, lyticase has been used in the lysis of yeast cell walls (e.g. *Candida*, *Debaryomyces*, *Saccharomyces*, *Saccharomycopsis*, *Saccharomycodes*, *Eremothecium*, and *Schwanniomyces* species).^{3,4}

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

One publication states that stock solutions of this product can be prepared at 1,900 units/0.2 mL of PBS.⁵ Another publication indicates preparation of stock solutions of this enzyme at 20 mg/mL in 20 mM sodium phosphate buffer, pH 7.⁶ A separate publication reports preparation of stock solutions of lyticase, though not this specific product, at 5 mg/mL in 1 M sorbitol with 0.1 M EDTA, pH 8.0, with storage of this stock solution at $-20\text{ }^{\circ}\text{C}$ in frozen aliquots.⁸ However, we have not tested any of these methods ourselves.

References

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GCY,DT,LB,MAM 03/19-1