Product Information

Lyticase from *Arthrobacter luteus*

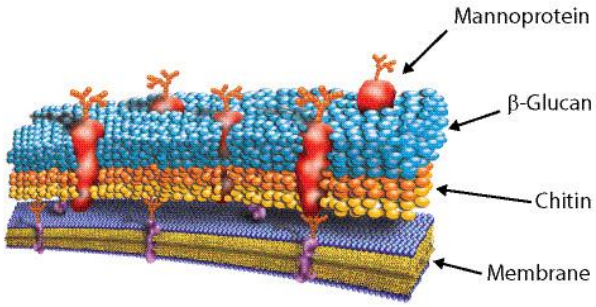
Lyophilized powder, ≥2,000 units/mg protein, Protein ≥20% by Biuret

L2524

Product Description

CAS Registry Number: 37340-57-1

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→3)-glucan laminaripentao-hydrolase with additional β-(1→3)-glucanase, protease, and mannanase activities.[1,2] For isolation of nucleic acids, lyticase has been used in the lysis of yeast cell walls (such as from *Candida*, *Debaryomyces*, *Saccharomyces*, *Saccharomycopsis*, *Saccharomycodes*, *Eremothecium*, and *Schwanniomyces* species).[3,4] Several publications cite use of this product in their protocols.[5,6] Several theses[7-11] and dissertations[12-22] have cited use of product L2524 in their protocols.

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

Several publications have reported preparation of stock solutions of this product at various concentrations and in different systems, with storage of the stock solutions at −20 °C, as follows:

- 20,000 U/mL in ddH_2O[23]
- 25,000 U/mL in 1× PBS[5]

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 °C in frozen aliquots.[24] However, we have not tested any of these methods ourselves.

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