



Yeast Lytic Enzyme (DAGA621)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

##Unit Definition:## The amount of activity causing a decrease in absorbance at 800 nm of 30%.

##General:## The extent of yeast cell lysis will vary with yeast strain, growth stage and cultural conditions.

##Essential Enzyme:## β -1,3-glucan laminaripentaohydrolase.

Yeast lytic enzyme has a low solubility. Use as a suspension. If it is necessary to make a sterile enzyme solution of more than 0.05%, make a 2% enzyme stock solution by dissolving Yeast lytic enzyme in a buffer solution (pH 7.5) which contains 5% glucose. Pipette suspension leaving any material that has sedimented in the container. Nitrocellulose filters are not recommended. Dilute sterile enzyme suspension on to desired concentration.

Antigen Description

Yeast lytic enzyme is an enzyme preparation from a submerged culture of *Arthrobacter luteus*¹ which effectively lyses cell walls of viable yeast cell^{2,3}. It is a lyophilized enzyme partially purified by affinity chromatography. The primary enzyme in this preparation responsible for lysis of viable yeast cells is β -1,3-glucan laminaripentaohydrolase. It hydrolyzes glucose polymers at the β -1,3-glucan linkages releasing laminaripentaose as the principal product. Quantazyme ylg is a highly active yeast lytic enzyme. Quantazyme ylg is a recombinant form of beta-1,3 Glucanase from *Oerskovia Xanthineolytica* that is free of protease activity, a problem inherent to all other commercially available yeast lytic enzyme preparations. It is also endo- and exonuclease free. Quantazyme ylg is the only yeast lytic enzyme that is completely free of protease, endonuclease and exonuclease activity. Quantazyme ylg is exceptionally stable, retaining full activity for months in solution at 4°C. It may be denatured in 8 M urea and will regain full activity upon dialysis.

Specificity

The lytic spectrum of this enzyme includes organisms from the following genera⁴: *Ashbya*, *Candida*, *Debaryomyces*, *Eremothecium*, *Endomyces*, *Hansenula*, *Hanseniaspora*, *Kloeckera*, *Kluyveromyces*, *Lipomyces*, *Metschnikowia*, *Pichia*, *Pullularia*, *Torulopsis*, *Saccharomyces*, *Saccharomycopsis*, *Saccharomycodes*, *Schwanniomyces* and others.

Conjugate

Unconjugated

Format	Lyophilized powder
Concentration	Batch dependent - please inquire should you have specific requirements.
Size	100 mg
Preservative	None
Storage	Store at 2 - 8°C in the lyophilized state. Approximately 90% of activity is lost when stored at 30°C for 3 months.

BACKGROUND

Keywords	Yeast Lytic Enzyme; QUANTAZYME ylg
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