

Product Information

Zymolyase®-20T, 20000 U/g, 1 g

C/No.	K.RGT-9107-20000U
Enzyme Activity	20,000 U/g
Packaging	1 g
Storage	Below -70 °C After reconstitution, store at -20 °C for 12 months

Apical Scientific Sdn Bhd
7-1 to 7-4, Jalan SP 2/7
Taman Serdang Perdana,
43300 Seri Kembangan
Selangor, Malaysia



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Description

Zymolyase®-20T is an enzyme used to lyse yeast cell walls by hydrolyzing the glucose polymers at the β -1,3-linkages that are present on yeast cell walls.

Source

Arthrobacter luteus

Essential Enzyme

β -1,3-glucan laminaripentaohydrolase

Unit Definition

One unit of lytic activity is defined as the amount that causes 30% of decrease in absorbance at 800nm (A_{800}) at 25 °C for 2 hours.

Applications

- Nucleic acid extraction from yeast
- Spheroplast/ protoplast formation
- Yeast cell fusion

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Stable pH

pH 5 – 10

Optimum pH & temperature

Lysis of viable yeast cells: pH 7.5 at 35 °C
Hydrolysis of yeast glucan: pH 6.5 at 45 °C

Heat Stability

Lytic activity of the enzyme is lost after 5 minutes at 60°C.

Contaminants

β -1, 3-glucanase	1.5×10^6 U/g
Protease	1.0×10^4 U/g
Mannanase	1.0×10^6 U/g
Amylase, Xylanase, Phosphatase	Minute amounts

Lytic Spectrum

Ashbya, Candida, Debaryomyces, Endomyces, Eremothecium, Hanseniaspora, Hansenula, Kloeckera, Kluyveromyces, Lipomyces, Metschnikowia, Pichia, Pullularia, Saccharomyces, Saccharomycopsis, Schizosaccharomyces, Torulopsis

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Quality Control

Enzyme Activity Assay

Lytic activity of the enzyme is verified by after incubation of yeast suspension with M/15 phosphate buffer (pH 7.5) and 0.05 - 0.1 mg/mL enzyme solution for 2 hours at 25 °C. Percentage of A_{800} decreased is measured to determine the units of lytic activity.

Note

Zymolyase is a registered trademark of the Kirin Brewery Co., Ltd.

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