

Zymolyase 20T Enzyme

Zymolyase 20T (Lyticase, Yeast Lytic Enzyme)

CATALOG #
AAA14844

PRODUCT SYNONYMS

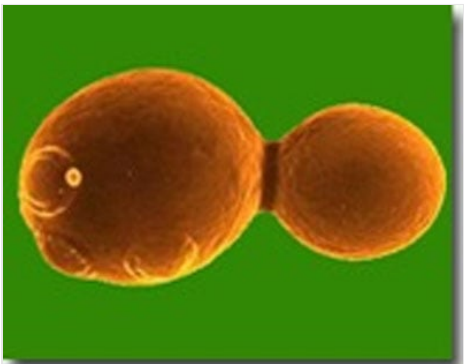
Zymolyase 20T; Zymolyase 20T (Lyticase; Yeast Lytic Enzyme); Zymolyase 20T enzyme

PRODUCT SPECIFICATIONS

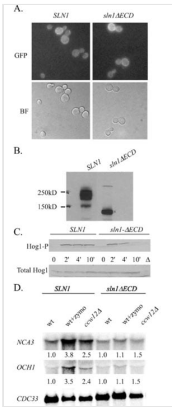
Form/Format	Lyophilized powder
Application Notes	Protoplast/Spheroplast Preparation, Yeast Cell Fusion, Yeast Cell Transformation
Grade	Molecular Biology Grade
Source	Arthrobacter luteus
CAS Number	37340-57-1
Essential Enzyme	B-1, 3-glucan laminaripentaohydrolase
RNase/DNase	Trace Levels
B-1,3-glucanase	1.5 x 10e6 units/g
Protease	1.0 x 10e4 units/g
Mannanase	1.0 x 10e6 units/g.
Optimum pH	7.5 @35 degree C For lysis of viable yeast cells 6.5 @ 45 degree C For hydrolysis of yeast glucan
Stable pH	5-10
Note	Zymolyase 100T is less soluble than 20T and may not be completely dissolved in buffers. If this is the case use as a suspension.
Storage Buffer	0.06M Phosphate Buffer, pH 7.5
Heat Stability	Lytic activity lost on incubation at 60 degree C for 5 minutes.
Activators	SH compounds-2-mercaptoethanol, cysteine or dithiothreitol.
RNase Activity Assay	Trace RNase activity was detected. Method: AAA14844 was suspended in 50mM Tris-HCl buffer, pH7.5. 10ul of AAA14844 was mixed with 140ul of cCMP (0.1 mg/ml in 50mM Tris-HCl buffer, pH 7.5) and the increase of absorbance at 284nm was measured. Unit Definition: One RNase A unit is defined as the amount required for hydrolysis of cCMP that results in an increase of 0.001 absorbance units at 284nm per minute
Unit Definition	One unit of lytic activity is defined as that amount which indicates 30% of decrease in absorbance at 800nm (A800). Refer to Assay for Enzymatic Activity.
DNase Activity Assay	Trace DNase activity was detected. Method: AAA14844 was suspended in 50mM Tris-HCl buffer, pH7.5, at a concentration of 2mg/ml and centrifuged to remove the debris. The supernatant was used for the Dnase assay. Reaction mixture (50mM Tris-HCl, pH 7.5, 1mM MnCl2, 50ng/ul lambda DNA-HindIII-digest, 0.4mg/ml AAA14844) was incubated at 30 degree C for 12 hours, inactivated by heating, and the degradation of lambda DNA was detected by using agarose gel electrophoresis.

Experimental Precautions	Avoid nitrocellulose filters due to non-specific adsorption onto the membrane.
Activity	21.6 u/mg
Preparation and Storage	Stable for 1 year at 4 degree C. About 70% of the lytic activity is lost when stored at 30 degree C for 3 months.

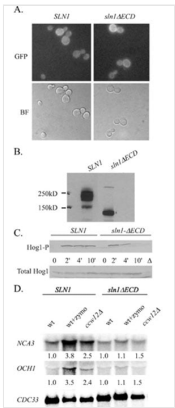
IMAGES



Application Data
Source:Arthrobacter luteus



Application Data
Cultures from the sin 1 (sln1Δ) strain JF2007, or sin 1 (sln1Δ) ccw 12 (sln1Δ), strain JF2368 transformed with the SLN 1 expression plasmids, pCLM994 (SLN1) or pCLM1774 (sln1 (sln1Δ) ECD), and treated with 1 unit/ml zymolyase (+) where indicated.NCA3 expression was normalized to expression of the SLN1-SKN7-independent CDC33 gene. The extent of induction by zymolyase is shown relative to the untreated SLN1 or sln 1(sln1Δ)ECD strains



Application Data
The extracellular domain is required for Sln1 kinase activation by wall perturbations. A, representative field showing localization of SLN1-GFP (pSS1881) or sln1ΔECD-GFP (pSS1904). BF, bright field. B, Western analysis showing reduced levels of sln1ΔECD compared with full-length SLN1. SLN1, JF2007 (sln1Δ) carrying full-length SLN1-myc (pCLM994); sln1ΔECD, JF2007 carrying sln1ΔECD-myc (pCLM1774). C, comparison of Hog1 phosphorylation kinetics in SLN1 (JF2008 (sln1Δ sho1Δ) carrying full-length (pCLM994)) and sln1ΔECD (JF2008 (sln1Δ sho1Δ) carrying sln1ΔECD (pCLM1774)) strains following addition of 0.4 M NaCl. D, Northern (RNA) hybridization analysis of RNA prepared from wild type

ADDITIONAL INFORMATION

Product Categories/Family for Zymolyase 20T enzyme	Molecular Biology; MB-Enzymes
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.