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A Geno Technology, Inc. (USA) brand name

LongLife™ PELB Lysozyme

With Nuclease Activity

(Cat. # 786-042)

INTRODUCTION

LongLife™ PELB Lysozyme is ready to use lysozyme preparation containing DNase and RNase, which can be used for spheroplast preparation, lysis of bacterial cells and further extraction of bacterial protein free from DNA/RNA. Simply take an aliquot and add in your sample.

APPLICATIONS

Spheroplast preparation, lysis and extraction of protein free from DNA/RNA from bacterial cells.

ITEM(S) SUPPLIED (Cat. # 786-042)

Description	Size
LongLife™ PELB Lysozyme	1.0ml

STORAGE CONDITIONS

It is shipped at ambient temperature. For long term storage, store at -20°C. Small aliquots of LongLife™ PELB Lysozyme can be stored short term (<3 months) at 4°C.

IMPORTANT INFORMATION

The PELB™ Lysozyme contains 40mg/ml Lysozyme (~80kU) supplemented with 800U/ml DNase and 24U/ml RNase. We recommend using the PELB™ Lysozyme at a final concentration of 0.1-1mg/ml. Higher levels of lysozyme will not improve lysis efficiency and may have an inhibitory effect.

PROTOCOL

Protein Extraction with Concurrent Removal of Nucleic Acids

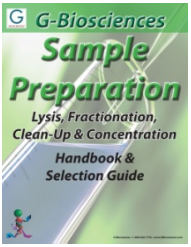
1. Pellet bacterial cells (bacterial culture, OD_{600} 1.5-2.0) by centrifugation at 5,000 x g for 10 minutes. Suspend the cell pellet in 5-10 volume of the bacterial lysis buffer (e.g. G-Biosciences Bacterial PE LB™ Buffer).
2. Vortex for 1 minute or until the cell suspension is homogeneous. Incubate the suspension for 5 minutes in cold. Vortex again to suspend the cells.
3. Vortex the tube containing PE LB™ Lysozyme to mix the frozen suspension. Add an appropriate volume of PELB™ Lysozyme to the cell suspension in Bacterial PELB™ Buffer to give a final concentration of 0.1-1mg/ml. Gently mix the content.
   NOTE: *The starting concentration of PELB™ Lysozyme is 40mg/ml.*
4. Incubate the suspension at 37°C for 30-60minutes.
   OPTIONAL: *Lysis can be monitored by taking 25µl suspension and mixing with 1ml Bacterial-PE LB™ Buffer and reading the optical density at OD 590nm.*
5. At the end of incubation period, vortex the content of the tube several times (30 seconds each) to complete the lysis. Lysis may be further assisted by pipetting the

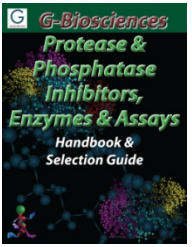
suspension up and down a few times with a narrow bore pipette tip or a 20 gauge syringe needle.

6. Removing DNA- During lysis, cellular DNA and RNA are cleaved which reduces the viscosity of the lysate. Some DNA fragments may survive, which would not interfere with downstream processing. However, for complete removal of nucleic acids, do not add EDTA into the Bacterial-*PE LB*™ Buffer. After lysis is complete EDTA may be added to a final concentration of 2.5mM.
7. Centrifuge the lysate at 20,000 x g at 4°C for 30 minutes and collect the clear lysate.
8. Lysate is now ready for any application, including electrophoresis, protein purification, or further analysis.

RELATED PRODUCTS

Download our Sample Preparation and Protease & Phosphatase Inhibitors, Enzyme & Assays Handbooks.





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