

Ver.23.04

Lysozyme

Cat. No.: ORT401-01

Concentration: 50mg/mL.

Description: Lysozyme is an enzyme used to break down bacterial cell walls to improve protein or nucleic acid extraction efficiency. Lysozymes (muramidases) are a family of enzymes with antimicrobial activity characterized by the ability to damage the cell wall of bacteria. The enzyme acts by catalyzing the hydrolysis of 1,4-beta-linkages between N-acetylmuramic acid and N-acetyl-D-glucosamine residues in peptidoglycans and between the N-acetyl-D-glucosamine residues in chitodextrins. Although hen egg white lysozyme is most effective for the lysis of gram-positive bacteria, it also facilitates the lysis of gram-negative bacteria such as Salmonella and Shigella. The lysis of E. coli is especially improved by the addition of both lysozyme and nucleases such as DNase I.

Applications:

- Bacterial cell-wall lytic enzyme that improves inclusion body protein purification.

Unit definition: One unit will produce a change in A_{450} of 0.001 per minute at pH 6.24 at 25°C, using a suspension of *Micrococcus lysodeikticus* as substrate, in a 2.6mL reaction mixture (1cm light path).

Storage: Store at -20°C. Do not store in a frost-free freezer. This product is guaranteed for 12 months from the date of receipt, if properly stored.