# Lysozyme

**Cat.No.:HYC121**

## Product Description

Lysozyme is a glycoside hydrolase with biological activity. It is composed of 18 kinds of 129 amino acid residues, has 4 S-S bonds, and has a molecular weight of 14307 Da. It can be used to hydrolyze the cell walls of Gram-positive and Gram-negative bacteria. Lysozyme has a good decomposition effect on Gram-positive bacteria, aerobic spore-forming bacteria, Bacillus subtilis, and radioresistant Micrococcus. It also has a certain degree of dissolution effect on Gram-negative bacteria such as Escherichia coli, common mutans, and Vibrio parahaemolyticus. Lysozyme has a special effect on decomposing peptidoglycan in bacterial cell walls. Lysozyme is soluble in water, insoluble in ether and acetone, and has a pI of 11.0-11.35. It can exist stably in acidic media and is easily inactivated in alkaline media. It is easily inhibited and destroyed by heavy metal ions ($Fe^{3+}$, $Cu^{2+}$, $Hg^{+}$,$Pb^{+}$, etc.) and oxidants, and should be avoided during storage or use.

## Components

| Components | Size-1 | Size-2 | Size-3 |
|---|---|---|---|
| Lysozyme | 1g | 5g | 100g |

## Storage

Stored at 2-8°C for 1 years.

## Unit Definition

One unit of lysozyme activity is defined as the amount of lysozyme required to cause an absorbance change of 0.001 per minute at 450 nm using a suspension of Micrococcus luteus at 25°C and pH 6.2.

## Specification

| | |
|---|---|
| CAS | 12650-88-3 |
| Appearance | White to off-white powder |
| Enzyme activity | 20000 U/mg |
| Source | Egg white |

## Instructions

As a typical representative of lysozymes, egg white lysozyme is a stable protein with an optimum pH of 4-6.5 and an optimum temperature of 35°C. The optimum amount of enzyme to be added depends on the specific situation.

## Notes

1. This product is limited to scientific research.
2. For your safety and health, please wear a lab coat and disposable gloves when operating.