

## Lysozyme

**Cat:** G8661

**Specification:** 1g /5g /50g

**Storage:** Store in a sealed container at 2-8°C, and it is valid for 1 year.

### Product Information

**CAS:** 12650-88-3

**English name:** Lysozyme

**Alias:** Cellulase; Globulin G1; Muramidase

**Appearance(Character):** White to almost-white powder

**Grade:** Ultra Pure Grade

**Enzyme Activity/Potency:** 20,000 U/mg

**Enzyme Activity Definition:** One F.I.P. (U) of lysozyme activity is equivalent to the amount of enzyme required to decrease the absorbance by 0.001 per minute at 450<sub>nm</sub> under optimal conditions.

**Solubility:** 50mg/ml in Water.

### Introduction

Lysozyme is a glycoside hydrolase with biological activity, consisting of 18 kinds of 129 amino acid residues, with 4 S-S bonds and a molecular weight of 14,307Da. It can be used to hydrolyze the cell walls of Gram-positive bacteria and Gram-negative bacteria. Lysozyme has good decomposition effects on Gram-positive bacteria, aerobic spore-forming bacteria, *Bacillus subtilis*, and radiation-resistant micrococci, and also has a certain degree of dissolution effect on Gram-negative bacteria such as *Escherichia coli*, common variants, and *Vibrio parahaemolyticus*. Lysozyme has a special function of decomposing peptidoglycan in bacterial cell walls.

This product is soluble in water, insoluble in ether and acetone, with a pI of 11.0-11.35. It can exist stably in acidic media and is easily inactivated in alkaline media. It is susceptible to inhibition and destruction by heavy metal ions such as Fe<sup>3+</sup>, Cu<sup>2+</sup>, Hg<sup>+</sup>, Pb<sup>+</sup>, and oxidants. Contact with them should be avoided during storage or use

### Usage Conditions

As a typical representative of lysozyme, hen egg white lysozyme is a stable protein with an optimal pH range of 4-6.5 and an optimal temperature of 35°C. The optimal amount of enzyme to be added must be determined based on specific conditions.

### Note

1. Unless otherwise specified, the biochemical reagents produced by our company are generally non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.
2. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.

3. The product information is for reference only. If you have any questions, please call 400-968-6088 for consultation.
4. The products are all for scientific research use only. Do not use it for medical, clinical diagnosis or treatment, food and cosmetics, etc. Do not store them in ordinary residential areas.
5. For your safety and health, please wear laboratory clothes, disposable gloves and masks to operate.