



GB Lysozyme powder

For Research use only

Cat No: GB2440

Size : 50 gr

Description:

GB Lysozyme, also known as muramidase or N-acetylmuramide glycanhydrolase, is an enzyme that breaks down the cell walls of bacteria, leading to their destruction. It is one of the first lines of defense in the immune response, targeting the peptidoglycan layer in bacterial cell walls. GB Lysozyme is extracted from egg white.

GB Lysozyme indeed has a significant role in molecular biology. Its function and importance extend beyond just an enzyme. It's a key player in understanding bacterial cell walls, immune responses, and much more. Here are some highlights:

Role in Molecular Biology

- **Antibacterial Agent:** Lysozyme is naturally found in various secretions like tears, saliva, and mucus, where it helps protect against bacterial infections by breaking down the cell walls of bacteria.
- **Research Tool:** In molecular biology, lysozyme is often used to lyse bacterial cells to release proteins, nucleic acids, and other intracellular components. This is crucial for processes like DNA extraction and protein purification.
- **Structure and Mechanism:** Studies of lysozyme have provided deep insights into enzyme kinetics, protein structure, and the mechanisms of enzyme action. It's one of the most well-characterized enzymes in terms of its structure and function.
- **Application in Biotechnology:** Lysozyme is utilized in various biotechnological applications, such as designing antibacterial agents, studying enzyme-substrate interactions, and developing disease-resistant transgenic plants.

In essence, lysozyme is not just a powerful enzyme but also a valuable tool and subject of study in molecular biology, aiding in numerous scientific breakthroughs and applications.

Preparation Instructions:

For gram positive bacteria cell lysis, use a freshly prepared lysozyme solution (10 mg/ml) in 10 mM Tris-HCl, pH 8.0. The product is also soluble in deionized water (10 mg/ml) yielding a clear to slightly hazy colorless solution. Aqueous solutions should retain activity for at least one month when stored between 2–8 °C

