

32-2517: Lysostaphin Recombinant Protein

Alternative Name : Lysostaphin, EC 3.4.24.75, Glycyl-glycine endopeptidase.

Description

Source : Escherichia Coli. Lysostaphin, an endopeptidase specific for the cell wall peptidoglycan of staphylococci, is an extremely potent anti-staphylococcal agent. Lysostaphin is used as a research and diagnostic tool. Because it lyses staphylococci efficiently, it is widely used when preparing staphylococcal DNA or other cellular components for genetic and biochemical studies and for the preparation of protoplasts for transformation. Preparation and analysis of bacterial DNA has become a powerful tool used by clinical and other microbiologists in epidemiological studies aimed at tracing sources of infection or bacterial contamination. The Mw of lysostaphin is 26,921 (Recsei et al, PNAS 1987).

Product Info

Amount : 5 mg

Purification : 96.9% as determined by RP-HPLC.

Content :

The protein was lyophilized without any additives. Bioactivity: Determined by the decrease in turbidity of a suspension of heat-killed *Staphylococcus aureus* at pH 8.0, 30°C. Specific Activity: Determined to be 4,243 units/mg. Protein Content: Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 2.02 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis RP-HPLC, using a calibrated solution of Lysostaphin as a Reference standard.

Storage condition :

Lysostaphin although stable at 4°C for 6 months, should be stored desiccated below -18°C. Please prevent freeze-thaw cycles. Lysostaphin has optimal in the range of pH 4.5, and optimal activity in the range of pH 8. For a stock solution it is recommended to work with 10mg/ml lysostaphin in 10mM sodium acetate pH 4.5.

Application Note

It is recommended to reconstitute the lyophilized Lysostaphin in 20mM sodium acetate, pH 4.5, which can then be further diluted to other aqueous solutions. Determined by the decrease in turbidity of a suspension of heat-killed *Staphylococcus aureus* at pH 8.0, 30°C. For a reaction buffer it is recommended to work with 200mM Tris-HCl pH 8.

