

## Native *Streptomyces globisporus* ATCC 21553 Mutanolysin

Cat. No. NATE-0464

Lot. No. (See product label)

### Introduction

**Description** Mutanolysin is an N-acetylmuramidase. Like lysozyme, it is a muralytic enzyme that cleaves the  $\beta$ -N-acetylmuramyl-(1 $\rightarrow$ 4)-N-acetylglucosamine linkage of the bacterial cell wall polymer peptidoglycan-polysaccharide. Its carboxy terminal moieties are involved in the recognition and binding of unique cell wall polymers. Mutanolysin lyses *Listeria* and other Gram-positive bacteria such as *Lactobacillus* and *Lactococcus*.

**Applications** Mutanolysin has been used in a study to assess lysing and generating protoplasts of dairy streptococci. It has also been used in a study to investigate the conversion of group B streptococci to protoplasts. It provides gentle cell lysis for the isolation of easily degradable biomolecules and RNA from bacteria. It has been used in the formation of spheroplasts for isolation of DNA. Provides gentle cell lysis for the isolation of easily degradable biomolecules and RNA from bacteria. It has been used in the formation of spheroplasts for isolation of DNA.

**Synonyms** Mutanolysin; 55466-22-3

### Product Information

**Source** *Streptomyces globisporus* ATCC 21553

**Form** lyophilized powder containing Ficoll and sodium succinate buffer salts.

**CAS No.** 55466-22-3

**Molecular Weight** 23 kDa

**Activity** > 4000 units/mg protein (biuret)

**Unit Definition** One unit will produce a  $\Delta A_{600}$  of 0.01 per minute at pH 6.0 at 37°C in a 1 mL volume using a suspension of *Streptococcus faecalis* cell wall as substrate.

### Storage and Shipping Information

**Storage** -20°C