

## Native *Staphylococcus aureus* Sphingomyelinase

Cat. No. NATE-0673

Lot. No. (See product label)

### Introduction

#### Description

Sphingomyelin phosphodiesterase is a hydrolase enzyme that is involved in sphingolipid metabolism reactions. SMase is a member of the DNase I superfamily of enzymes and is responsible for breaking sphingomyelin (SM) down into phosphocholine and ceramide. The activation of SMase has been suggested as a major route for the production of ceramide in response to cellular stresses.

#### Synonyms

Sphingomyelin phosphodiesterase; EC 3.1.4.12; neutral sphingomyelinase; 9031-54-3; sphingomyelin cholinephosphohydrolase; sphingomyelinase; SMase

### Product Information

#### Source

*Staphylococcus aureus*

#### Form

buffered aqueous glycerol solution; Solution in 50% glycerol containing 0.25 M phosphate buffer, pH 7.5

#### EC Number

EC 3.1.4.12

#### CAS No.

9031-54-3

#### Activity

100-300 units/mg protein (Lowry)

#### Unit Definition

One unit will hydrolyze 1.0  $\mu$ mol of TNPAL-sphingomyelin per min at pH 7.4 at 37°C.

### Storage and Shipping Information

#### Storage

2-8°C