

## Native *Pseudomonas atlantica* Agarase

Cat. No. NATE-0040

Lot. No. (See product label)

### Introduction

**Description** Agarase is an enzyme with system name agarose 4-glycanohydrolase. It found in agarolytic bacteria and is the first enzyme in the agar catabolic pathway. It is responsible for allowing them to use agar as their primary source of Carbon and enables their ability to thrive in the ocean. Agarases are classified as either  $\alpha$ -agarases or  $\beta$ -agarases based upon whether they degrade  $\alpha$  or  $\beta$  linkages in agarose, breaking them into oligosaccharides. When secreted,  $\alpha$ -agarases yield oligosaccharides with 3.6 anhydro-L-galactose at the reducing end whereas  $\beta$ -agarases result in D-galactose residues.

**Synonyms** agarase; AgaA; AgaB; endo- $\beta$ -agarase; agarose 3-glycanohydrolase; EC 3.2.1.81; 37288-57-6

### Product Information

**Source** *Pseudomonas atlantica*

**Form** lyophilized powder. Contains phosphate buffer salts. May contain bovine serum albumin to standardize protein content.

**EC Number** EC 3.2.1.81

**CAS No.** 37288-57-6

**Activity** > 5,000 units/mg protein (Lowry)

**Unit Definition** One unit will produce 1.0  $\mu$ g of reducing sugar (measured as D-galactose) from agar per min at pH 6.0 at 40°C.

### Storage and Shipping Information

**Storage** 2-8°C