

Native Human Lysozyme

Cat. No. NATE-0433

Lot. No. (See product label)

Introduction

Description

Lysozymes, also known as muramidase or N-acetylmuramide glycanhydrolase, are glycoside hydrolases. These are enzymes (EC 3.2.1.17) that damage bacterial cell walls by catalyzing hydrolysis of 1,4-beta-linkages between N-acetylmuramic acid and N-acetyl-D-glucosamine residues in a peptidoglycan and between N-acetyl-D-glucosamine residues in chitodextrins. Lysozyme is abundant in a number of secretions, such as tears, saliva, human milk, and mucus. It is also present in cytoplasmic granules of the macrophages and the polymorphonuclear neutrophils (PMNs). Large amounts of lysozyme can be found in egg white. C-type lysozymes are closely related to alpha-lactalbumin in sequence and structure, making them part of the same family. In humans, the lysozyme enzyme is encoded by the LYZ gene.

Synonyms

muramidase; globulin G; mucopeptide glucohydrolase; globulin G1; N,O-diacetylmuramidase; lysozyme g; L-7001; 1,4-N-acetylmuramidase; mucopeptide N-acetylmuramoylhydrolase; PR1-lysozyme; lysozyme; LYZ; LZM; EC 3.2.1.17; 9001-63-2

Product Information

Species

Human

Source

Human neutrophils

Form

Lyophilized from 50 mM sodium acetate, pH 6.0, with 100 mM NaCl

EC Number

EC 3.2.1.17

CAS No.

9001-63-2

Purity

> 95% (SDS-PAGE)

Activity

30,000 Sugar units per mg

Pathway

Amyloids, organism-specific biosystem; C-MYB transcription factor network, organism-specific biosystem; Disease, organism-specific biosystem; Salivary secretion, organism-specific biosystem; Salivary secretion, conserved biosystem

Function

hydrolase activity, acting on glycosyl bonds; lysozyme activity

Unit Definition

One unit is defined as the amount of enzyme that digest powdered cells of *Micrococcus lysodeikticus*, causing a decrease in absorbancy of 0.001 per minute at 37°C, pH 7.0.

Storage and Shipping Information

Storage

-20°C