Creative Enzymes®

Lysozyme from Human, Recombinant

Cat. No. NATE-0434

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	Rice
Form	lyophilized powder
EC Number	EC 3.2.1.17
CAS No.	9001-63-2
Activity	> 100 ,000 units/mg protein (E1%/280)
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 will produce a ΔA450 of 0.001 per min at pH 6.24 at 25°C, using a suspension of Micrococcus lysodeikticus as substrate, in a 2.6 mL reaction mixture (1 cm light path).

Usage and Packaging

Package	Package size based on protein content

Storage and Shipping Information

Storage	−70°C