Creative Enzymes®

Lysozyme 25A from Streptococcus pneumoniae, Recombinant

Cat. No. NATE-1456

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	Streptococcus pneumoniae
Source	E. coli
Form	35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl2, 0.02% sodium azide and 25% (v/v) glycerol
EC Number	EC 3.2.1.17
CAS No.	9001-63-2
Molecular Weight	26.3 kDa
Purity	>90% by SDS-PAGE
Concentration	1 mg/mL
Optimum pH	5
Optimum temperature	37 °C
Specificity	4-nitrophenyl-(GlcNAc)5

Storage and Shipping Information

Storage	This enzyme is shipped at room temperature but should be stored at -20 °C.