Creative Enzymes®

Native Human Cathepsin G, Gamma Irradiated

Cat. No. CEFX-022

Lot. No. (See product label)

Introduction

Description	Cathepsin G is an enzymatic protein belonging to the peptidase or protease families. In humans, it is coded by the CTSG gene. The protein encoded by this gene, a peptidase S1 protein family member, is found in azurophil granules of neutrophilic polymorphonuclear leukocytes. The encoded protease has a specificity similar to that of chymotrypsin C, but it is most closely related to other immune serine proteases, such as neutrophil elastase and granzymes. Cathepsin G may participate in the killing and digestion of engulfed pathogens and in connective tissue remodeling at sites of inflammation. It also localizes to Neutrophil extracellular traps (NETs), via its high affinity for DNA, an unusual property for serine proteases. Transcript variants utilizing alternative polyadenylation signals exist for this gene.

Product Information

Species	Human
Source	Leukocytes in septic human sputum
Form	Powder
EC Number	EC 3.4.21.20
Molecular Weight	23500
Activity	2 - 4 units/mg of powder
Unit Definition	1 unit will hydrolyze 1 μM of Suc-Ala-Ala-Pro-Phe-pNA per minute at pH 7.5 and 25°C.

Storage and Shipping Information

Storage	Stable for 9 to 18 months at 5°C in a closed container