

## 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

<b>Species</b>	Human
<b>Source</b>	Leukocytes in septic human sputum
<b>Form</b>	Powder
<b>EC Number</b>	EC 3.4.21.20
<b>Molecular Weight</b>	23500
<b>Activity</b>	2 - 4 units/mg of powder
<b>Unit Definition</b>	1 unit will hydrolyze 1 $\mu$ M 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