

Cathepsin G from Human Neutrophil

np001109

Storage: Store at 2-8°C long term (24 months).

Product Description

Cathepsin G from human leukocytes is a neutral proteinase secreted by neutrophil granulocytes. It belongs to the family of serine proteases. Cathepsin G is a glycoprotein, which contains 1% carbohydrate. The gene is located on human chromosome 14q12.

Application

Cathepsin G from human leukocytes has been used to determine protease sensitivity. It has also been used for the stimulation and staining of dendritic cells and macrophage.

Biochem/physiol Actions

Cathepsin G from human leukocytes degrades various proteins, such as elastin, collagen, fibrinogen and immunoglobulin. It may be implicated in muscle catabolism. Cathepsin G is involved in the activation or inactivation of protein hormones and the inactivation of plasma proteinase inhibitors. It alters the cytoskeleton, enhances the permeability of vascular endothelial cells and the chemotaxis of inflammatory cells. Cathepsin G is associated with autoimmunity and cancer. It exhibits chymotrypsin and trypsin like activity. Cathepsin G modulates neutrophil effector functions.

Cathepsin G has pro-apoptotic activity and can activate caspases in vitro.