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Rat Cystatin C
RECOMBINANT PROTEIN
Recombinant Rat Cystatin C

Catalog Number: PRP-438PRO
Quantity: 2 micrograms, 10 micrograms, 1 milligram
Format: Sterile-filtered white lyophilized (freeze-dried) powder
Host: *E. coli*

Background:

Cystatins are a superfamily of cysteine proteinase inhibitors found in both plants and animals. They comprise a group of proteinase inhibitors, widely distributed in tissues and body fluids, and form tight complexes with cysteine proteases such as cathepsin B, H, L and S. Cystatin C, a secreted molecule of this family, is of interest from biochemical, medicine and evolutionary points of view. Cystatin C, with molecular weight of 13260 Da, is composed of 120 amino acids, lacks carbohydrate and has two disulfide bridges located near the carboxyl terminus. Cystatin C is increased in patients with malignant diseases, and is related to the insufficiency of renal function and appears to be a better marker than creatinine. On the other hand, low levels of cystatin C cause breakdown of the elastic laminae followed by atherosclerosis and abdominal aortic aneurysm.

Specificity and Preparation:

Rat Cystatin C is a total of 134 AA with a calculated molecular weight of 14.93 kDa. This recombinant protein was produced in *E. coli* and has an N-terminal His-tag (14AA). Purity is >96% as determined by SDS-PAGE.

Usage and Storage:

Reported to be effective for immunoblotting (western blot). Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing and thawing. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C. Minimum shelf life 2 years. To reconstitute, add 0.2 ml of 0.1 M Acetate buffer pH 4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 0.1 mg/ml. In higher concentrations the solubility of this antigen is limited. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate. This material is provided for LABORATORY RESEARCH USE ONLY.

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