

Cystatin C Rat, Sheep Polyclonal Antibody

Product Data Sheet

Source of Antigen: E. coli Cat. No.:

Host: Sheep RD384009100 (0.1 mg)

Other names: Post G-globulin, Cystatin-3, Neuroendocrine basic polypeptide, Gamma-trace, Post-gamma-globulin, CST3

Research topic

Animal studies, Neural tissue markers, Renal disease

Preparation

The antibody was raised in sheep by immunization with the recombinant Rat Cystatin C.

Amino Acid Sequence

The immunization antigen (14.93 kDa) is a protein containing 134 AA of recombinant Rat Cystatin C. N-terminal His-tag, 14 extra AA (highlighted).

MRGSHHHHHH GMASGTSRPP PRLLGAPQEA DASEEGVQRA LDFAVSEYNK GSNDAYHSRA IQVVRARKQL VAGINYYLDV EMGRTTCTKS QTNLTNCPFH DQPHLMRKAL CSFQIYSVPW KGTHTLTKSS CKNA

Species Reactivity

Rat

Not yet tested in other species.

Purification Method

Immunoaffinity chromatography on a column with immobilized recombinant Rat Cystatin C.

Antibody Content

0.1 mg (determined by BCA method)

Formulation

The antibody is lyophilized in 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. AZIDE FREE.

Reconstitution

Add 0.1 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage/Stability

The lyophilized antibody remains stable and fully active until the expiry date when stored at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles and store frozen at -80°C. Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show decline in activity after one week at 4°C.

Expiration

See vial label.

Lot Number

See vial label.

Quality Control Test

Indirect ELISA - to determine titer of the antibody SDS PAGE - to determine purity of the antibody

Applications

ELISA, Western blotting

Introduction to the Molecule

Cystatin C is a non-glycosilated basic single-chain protein consisting of 120 amino acids with a molecular weight of 13.36 kDa and is characterized by two disulfide bonds in the carboxy-terminal region. It belongs to the cystatins superfamilly which inactivates lysosomal cysteine proteinases, e.g. cathepsin B, H,.K, L and S. Imbalance between Cystatin C and cysteine proteinases is associated with inflammation, renal failure, cancer, Alzheimer's di-sease, multiple sclerosis and hereditary Cystatin C amyloid angiopathy. Its increased level has been found in patients with autoimune diseases, with colorectal tumors and in patients on dyalisis. Serum Cystatin C seems to be better marker of glomerular filtration rate than creatinine. On the other hand, low concentration of Cystatin C presents a risk factor for secondary cardiovascular events.

Note

This product is for research use only.

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