Endostatin Human,
Rabbit Polyclonal Antibody

Product Data Sheet

Source of Antigen: *Pichia pastoris*
Host: Rabbit

Cat. No.:
RD181076100 (0.1 mg)

Research topic
Oncology

Preparation
The antibody was raised in rabbits by immunization with the recombinant Human Endostatin. The immunization antigen (20 kDa) is a terminal fragment of collagen XVIII.

Species Reactivity
Human
Not yet tested in other species.

Purification Method
Immunoaffinity chromatography on a column with immobilized recombinant Human Endostatin.

Antibody Content
0.1 mg (determined by BCA method, BSA was used as a standard)

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
Endostatin is a 20 kDa C-terminal fragment of collagen XVIII. The exact molecular mass determined by ESI-MS was found to be 18 494 Da.Endostatin specifically inhibits. endothelial proliferation and potently inhibits angiogenesis and tumor growth. Anti-endostatin monoclonal antibody administered to nude mice transplanted with human hepatocellular carcinoma cells (JHH-1

line) that endogenously produced endostatin promoted tumor angiogenesis by inhibiting endostatin activity in the tumor and subsequently increased tumor mass by preventing cancer cells from undergoing apoptosis. The ability of endostatin to bind Zn2+ is essential for its antiangiogenic activity. The endostatin precursor collagen XVIII is expressed at high levels in human livers, the main source being hepatocytes. The generation of endostatin or endostatin-like collagen XVIII fragments is catalyzed by proteolytic enzymes, including cathepsin L and matrix metalloproteases, that cleave peptide bonds within the protease-sensitive hinge region of the C-terminal domain. The processing of collagen XVIII to endostatin may represent a local control mechanism for the regulation of angiogenesis. Circulating endostatin was detected in patients with various types of cancer as well as in healthy controls. Circulating endostatin concentrations are significantly increased in patients with systemic sclerosis. Interestingly, pericardial fluid levels of endostatin are associated with the presence (40% lower levels) or absence of collaterals in patients with CAD.

Note

This product is for research use only.

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