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Heparanase 1 (HPA1), Polyclonal

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ABP0014

Product Overview

Name	Heparanase 1 (HPA1), Polyclonal

Description

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Introduction

Heparanase is an endo ß-D-glucuronidase, which degrades heparan sulfate side chains of heparan sulfate proteoglycans (HSPGs) in the extracellular matrix. Heparanase plays an important role in ECM degradation, facilitating the migration and extravasation of tumor cells and inflammatory leukocytes (1,2,3). Upon degradation, heparanase releases growth factors and cytokines that stimulate cell proliferation and chemotaxis (4,5). Heparanase is a heterodimer comprised of a 50 kDa subunit harboring the active site and a 8 kDa subunit. It is produced as a latent 65 kDa precursor and proteolytically processed to its active form (1,6). Heparanase is highly expressed in myeloid leukocytes (i.e. neutrophils) in platelets and in human placenta. Human heparanase was found to be upregulated in various types of primary tumors, correlating in some cases with increased tumor invasiveness and vascularity and with poor prospective survival (7,8).

Source

Polyclonal rabbit anti-human HPA1 is a Protein G affinity purified polyclonal antibody raised against the 50 kDa-8 kDa Heparanase heterodimer.

Formulation

Each vial contains 0.29 mg or 0.57 mg of antibody in 50 or 100 µL, respectively, of 20 mM sodium phosphate; 150 mM NaCl; pH 7.2, containing 0. 01% Thimerosal.

Stability

Store at 4°C. For extended storage, freeze in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.

Applications

Western blot Immunohistochemistry

References

1. I. Vlodavsky, Y. Friedmann, M. Elkin, H. Aingorn, R. Atzmon, R. Ishai-Michaeli, M. Bitan, O. Pappo, T. Peretz, I. Michal, L. Spector, I. Pecker. 1999. Mammalian heparanase: gene cloning, expression and function in tumor progression and metastasis. Nat. Med. 5: 793-802. 2. I. Vlodavsky, Y. Friedmann. 2001. Molecular properties and involvement of heparanase in cancer metastasis and angiogenesis. J. Clin. Invest. 108: 341-347. 3. C.R. Parish, C.

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Specificity

Western blot analysis: The antibody reacts with the 65 kDa precursor as well as the 50 kDa and 8 kDa subunits of human or mouse Heparanase. Immunohistochemistry: The antibody interacts with Heparanase in paraffin sections and blood smears. Recommended dilution range for Western blot analysis: 1:2000. Recommended dilution range for immunohistochemistry: 1:100.

Data Sheet

To view the FULL VERSION click Heparanase-1 Polyclonal Rabbit :

Precautions

Heparanase 1 (HPA1), Polyclonal is for research use only and not for use in diagnostic or therapeutic procedures.