

Product datasheet

Anti-Heparanase 1 antibody ab85543

★★★★☆ [2 Abreviews](#) [18 References](#) [3 Images](#)

Overview

Product name	Anti-Heparanase 1 antibody
Description	Rabbit polyclonal to Heparanase 1
Host species	Rabbit
Specificity	ab85543 recognizes the 65kD precursor as well as the 50kD and 8kD subunits of Heparanase 1.
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Recombinant full length protein corresponding to Human Heparanase 1.
Positive control	Human spleen tissue.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Thimerosal (merthiolate) Constituent: PBS
Purity	Protein G purified
Clonality	Polyclonal
Isotype	IgG

Applications

The **Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab85543 in the following tested applications.

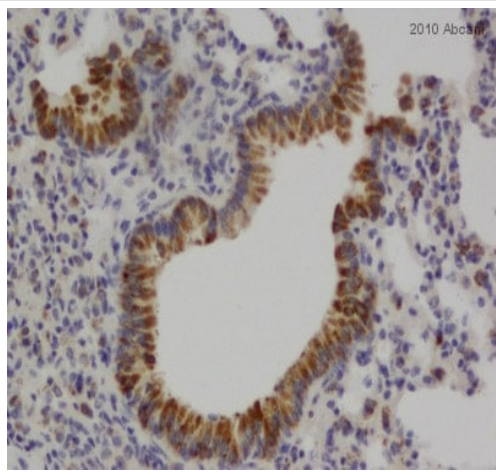
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500. Predicted molecular weight: 62 kDa.
IHC-P	★★★★★ (1)	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function	Endoglycosidase which is a cell surface and extracellular matrix-degrading enzyme. Cleaves heparan sulfate proteoglycans (HSPGs) into heparan sulfate side chains and core proteoglycans. Also implicated in the extravasation of leukocytes and tumor cell lines. Due to its contribution to metastasis and angiogenesis, it is considered to be a potential target for anti-cancer therapies.
Tissue specificity	Highly expressed in placenta and spleen and weakly expressed in lymph node, thymus, peripheral blood leukocytes, bone marrow, endothelial cells, fetal liver and tumor tissues.
Sequence similarities	Belongs to the glycosyl hydrolase 79 family.
Post-translational modifications	<p>Proteolytically processed. The cleavage of the 65 kDa form leads to the generation of a linker peptide, 8 kDa and 50 kDa product. The active form, the 8/50 kDa heterodimer, is resistant to degradation. Complete removal of the linker peptide appears to be a prerequisite to the complete activation of the enzyme.</p> <p>N-glycosylated. Glycosylation of the 50 kDa subunit appears to be essential for its solubility.</p>
Cellular localization	Lysosome membrane. Secreted. Secreted, internalised and transferred to late endosomes/lysosomes as a proheparanase. In lysosomes, it is processed into the active form, the heparanase. The uptake or internalisation of proheparanase is mediated by HSPGs. Heparin appears to be a competitor and retain proheparanase in the extracellular medium.

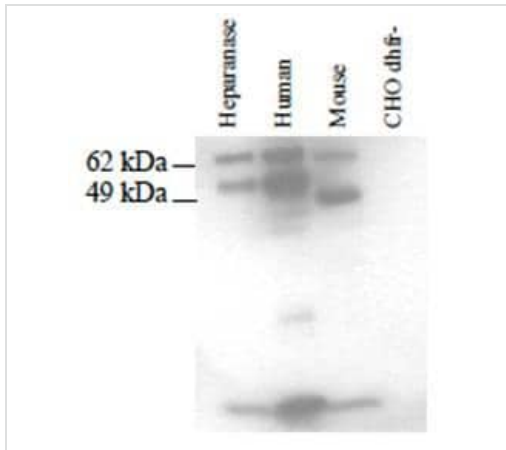
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Heparanase 1 antibody (ab85543)

This image is courtesy of an Abreview submitted by Jim Manavis

ab85543 staining Heparanase 1 in Human lung tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% NHS for 30 minutes at room temperature; antigen retrieval was by heat mediation with an EDTA buffer. Samples were incubated with primary antibody (1/4000 in NHS) for 8 hours. A Biotin-conjugated Goat anti-rabbit IgG polyclonal (1/250) was used as the secondary antibody.



Western blot - Anti-Heparanase 1 antibody (ab85543)

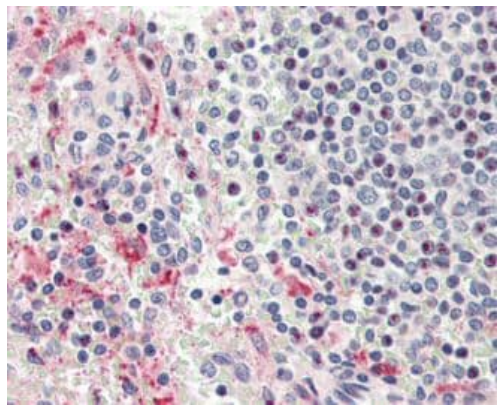
Purified recombinant human heparanase served as a control (Lane1). Lane2: An extract from 6.5×10^3 CHO cells, transfected with human Heparanase; Lane3: extract from 8×10^4 CHO cells, transfected with mouse Heparanase, and Lane4: extract from 5×10^5 non-transfected CHO dhfr- cells, were loaded onto 4-12% NuPage gel. The proteins were transferred to a PVDF and subjected to Western Blot analysis using ab85543 at 1:1000 dilution. The 65kD precursor and the 50kD and 8kD subunits are clearly detected. Lane 1 : Purified recombinant human Heparanase served as a control

Lane 2 : Extract from 6.5×10^3 CHO cells, transfected with human Heparanase

Lane 3 : Extract from 8×10^4 CHO cells, transfected with mouse Heparanase

Lane 4 : Extract from 5×10^5 non-transfected CHO dhfr- cells

Cell were loaded onto 4-12% NuPage gel. The proteins were transferred to a PVDF and subjected to Western Blot analysis using ab85543 at 1:1000 dilution. The cleavage of the 65 kDa form leads



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Heparanase 1 antibody (ab85543)

ab85543, at 5µg/ml, staining Heparanase 1 in formalin-fixed, paraffin-embedded human spleen tissue by Immunohistochemistry.

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