

## Product datasheet

# Anti-Glypican 3 antibody [SP86] ab95363

**KO VALIDATED** Recombinant RabMAB

[2 References](#) [9 Images](#)

### Overview

<b>Product name</b>	Anti-Glypican 3 antibody [SP86]
<b>Description</b>	Rabbit monoclonal [SP86] to Glypican 3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, Flow Cyt, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human Glypican 3 aa 500 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: <a href="#">P51654</a>
<b>Positive control</b>	Human liver cancer tissue This antibody gave a positive result when used in the following formaldehyde fixed cell lines: HepG2. ICC/IF: HepG2 Flow Cyt: HepG2
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p> <p><b>This product is FOR RESEARCH USE ONLY. For commercial use, please contact <a href="mailto:partnerships@abcam.com">partnerships@abcam.com</a>.</b></p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.1% Sodium azide Constituents: 1% BSA, PBS
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	SP86
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab95363 in the following tested applications.

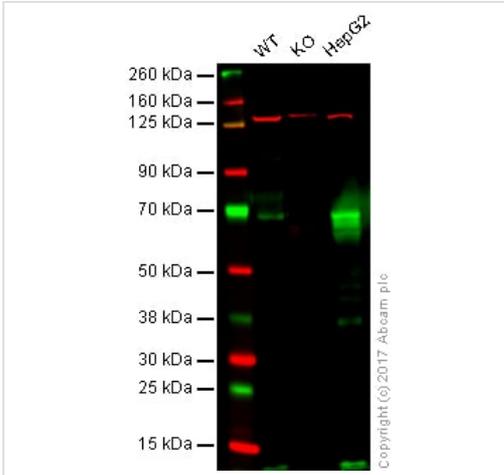
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/200.
Flow Cyt		1/80. <a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 66 kDa.
IHC-P		1/100. Perform heat mediated antigen retrieval (boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min).

## Target

<b>Function</b>	Cell surface proteoglycan that bears heparan sulfate. Inhibits the dipeptidyl peptidase activity of DPP4. May be involved in the suppression/modulation of growth in the predominantly mesodermal tissues and organs. May play a role in the modulation of IGF2 interactions with its receptor and thereby modulate its function. May regulate growth and tumor predisposition.
<b>Tissue specificity</b>	Highly expressed in lung, liver and kidney.
<b>Involvement in disease</b>	Defects in GPC3 are the cause of Simpson-Golabi-Behmel syndrome type 1 (SGBS1) [MIM:312870]; also known as Simpson dysmorphia syndrome (SDYS). SGBS is a condition characterized by pre- and postnatal overgrowth (gigantism) with visceral and skeletal anomalies.
<b>Sequence similarities</b>	Belongs to the glypican family.
<b>Cellular localization</b>	Cell membrane and Secreted > extracellular space.

## Images



Western blot - Anti-Glypican 3 antibody [SP86] (ab95363)

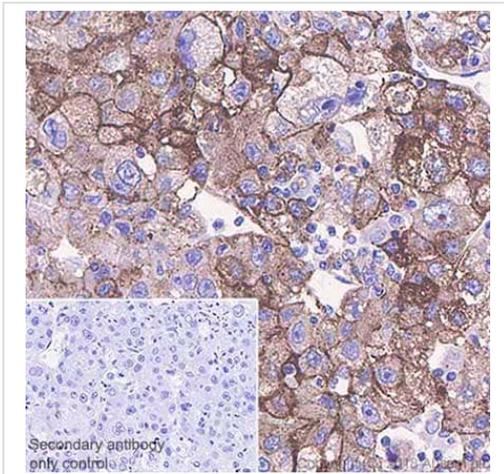
**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)

**Lane 2:** GPC3 knockout HAP1 whole cell lysate (20 µg)

**Lane 3:** HepG2 whole cell lysate (20 µg)

**Lanes 1 - 3:** Merged signal (red and green). Green - ab95363 observed at 70 kDa. Red - loading control, ab130007, observed at 125kDa.

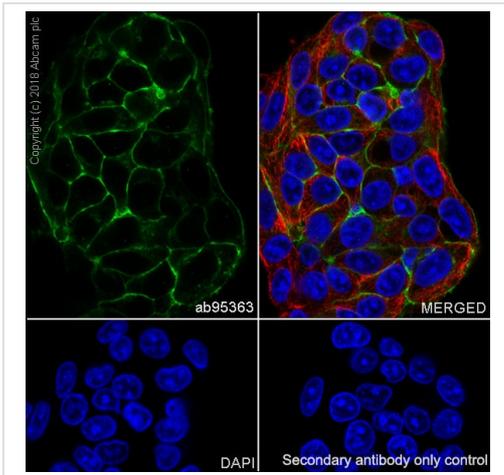
ab95363 was shown to specifically react with Glypican 3 in wild-type HAP1 cells as signal was lost in GPC3 knockout cells. Wild-type and GPC3 knockout samples were subjected to SDS-PAGE. ab95363 and ab130007 (Mouse anti-vinculin loading control) were incubated overnight at 4°C at 1/1000 and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [SP86] (ab95363)

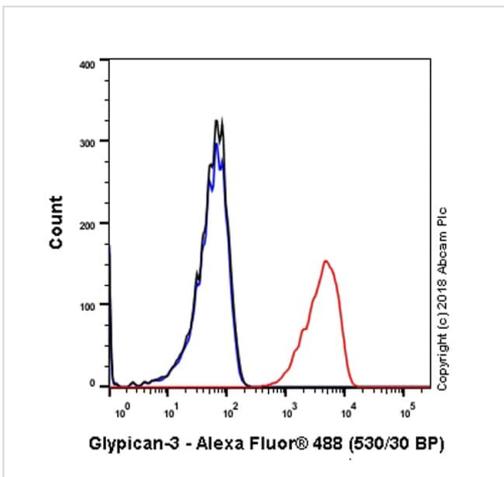
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human hepatocellular carcinoma tissue sections labeling Glypican 3 with ab95363 at 1:100 dilution (4.66 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on human hepatocellular carcinoma, performed on a Leica Biosystems BOND™ RX instrument.

The section was incubated with ab95363 for 30 mins at room temperature.



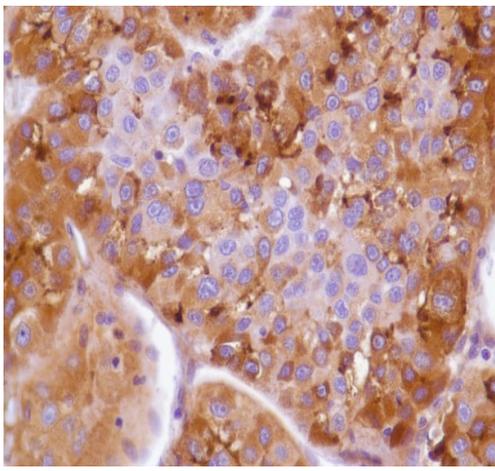
Immunocytochemistry/ Immunofluorescence - Anti-Glypican 3 antibody [SP86] (ab95363)

Immunocytochemistry/ Immunofluorescence analysis of HepG2 (human hepatocellular carcinoma epithelial cell) cells labeling Glypican 3 with purified ab95363 at 1/200 (2.3 µg/ml). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



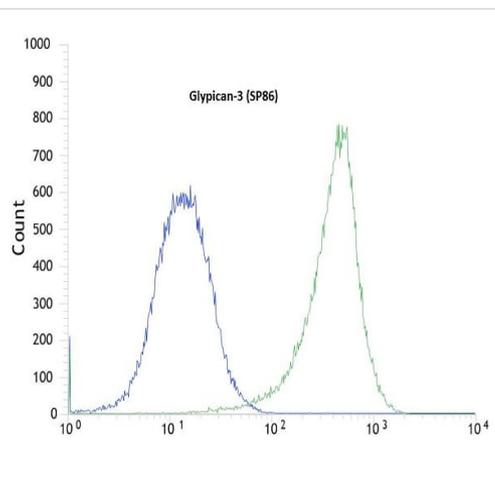
Flow Cytometry - Anti-Glypican 3 antibody [SP86] (ab95363)

Flow cytometry analysis of HepG2 (human hepatocellular carcinoma) labeling Glypican 3 with purified ab95363 at 1/80 dilution (5.825 µg/ml) (red). Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, ab150077) at 1/2000 dilution was used as a secondary antibody. Isotype control - Rabbit monoclonal IgG (ab172730) (Black). Unlabeled control -Unlabelled cells (blue).



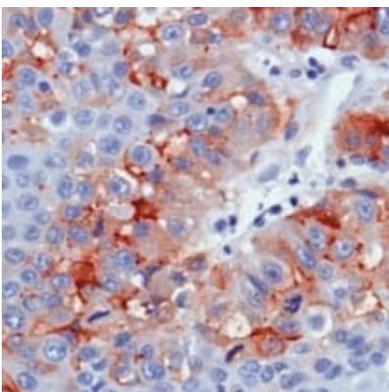
Immunohistochemical staining of human liver hepatocellular carcinoma with ab95363.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [SP86] (ab95363)



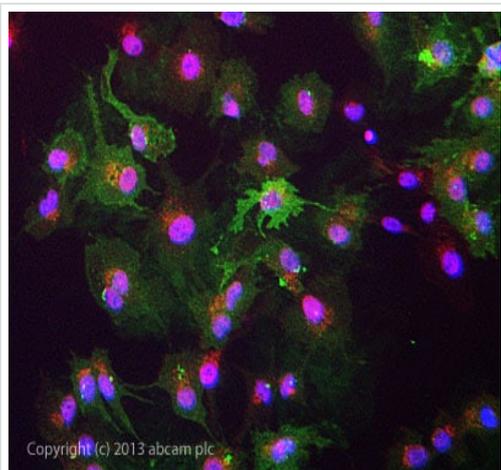
Flow cytometric analysis of rabbit anti-Glypican 3 (SP86) antibody [ab98363](#) (1/100) in HEPG2 cells (green) compared to negative control of rabbit IgG (blue).

Flow Cytometry - Anti-Glypican 3 antibody [SP86] (ab95363)



ab95363, at 1/100 dilution, staining Glypican 3 in formalin-fixed, paraffin-embedded Human liver cancer tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [SP86] (ab95363)



Immunocytochemistry/ Immunofluorescence - Anti-Glypican 3 antibody [SP86] (ab95363)

ICC/IF image of ab95363 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab95363 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-Glypican 3 antibody [SP86] (ab95363)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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