

Product datasheet

Anti-Glypican 3 antibody [SP86] - BSA and Azide free ab238804

KO VALIDATED Recombinant RabMAB

9 Images

Overview

Product name	Anti-Glypican 3 antibody [SP86] - BSA and Azide free
Description	Rabbit monoclonal [SP86] to Glypican 3 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-P, ICC/IF, WB, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HepG2 and Wild-type HAP1 whole cell lysate. ICC/IF: HepG2 cells Flow Cyt: HepG2 cells
General notes	ab238804 is the carrier-free version of ab95363 .

Our [carrier-free](#) antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP86
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab238804 in the following tested applications.

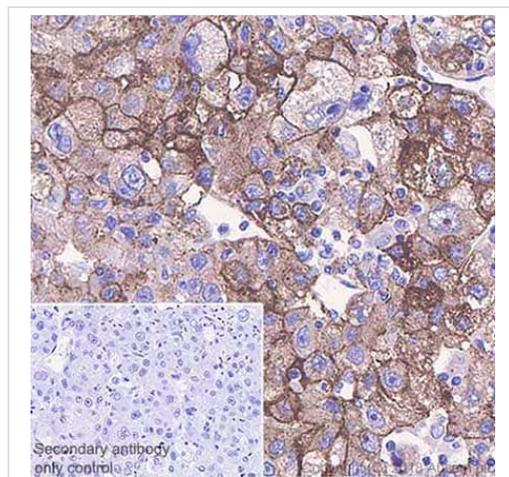
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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

Target

Function	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.
Tissue specificity	Highly expressed in lung, liver and kidney.
Involvement in disease	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.
Sequence similarities	Belongs to the glypican family.

Images

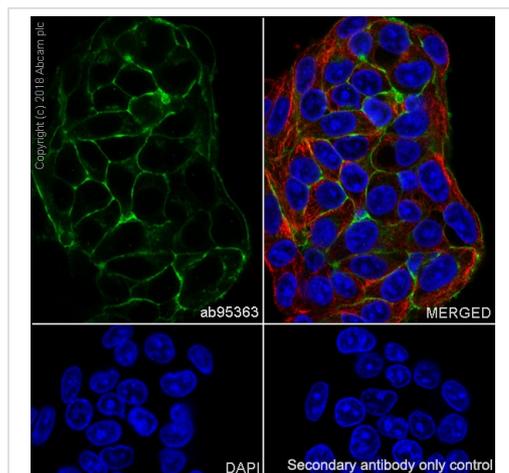


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

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.

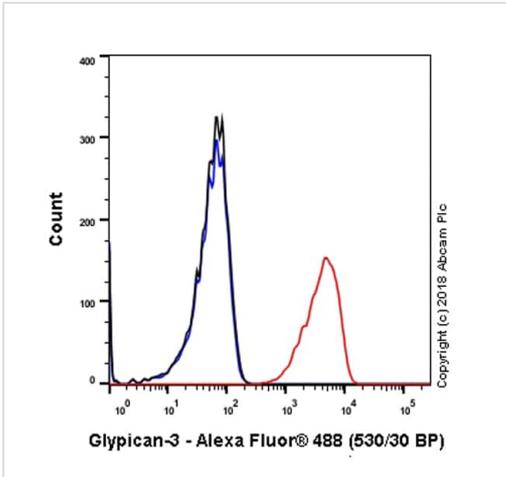
This image was generated using [ab95363](#), the same clone, but with a different buffer formulation.



Immunocytochemistry/ Immunofluorescence - Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

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® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 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.

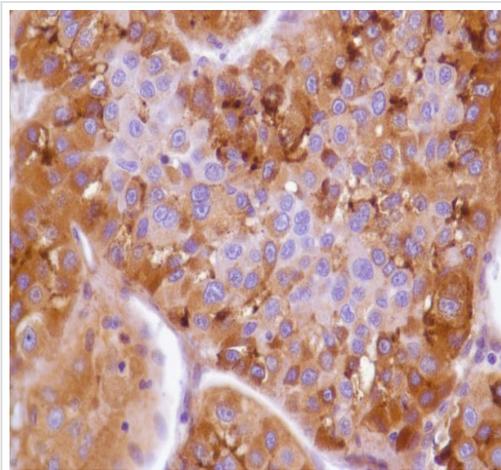
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab95363](#)).



Flow Cytometry - Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

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® 488, [ab150077](#)) at 1/2000 dilution was used as a secondary antibody. Isotypecontrol - Rabbit monoclonal IgG ([ab172730](#)) (black). Unlabeled control - Unlabelled cells (blue).

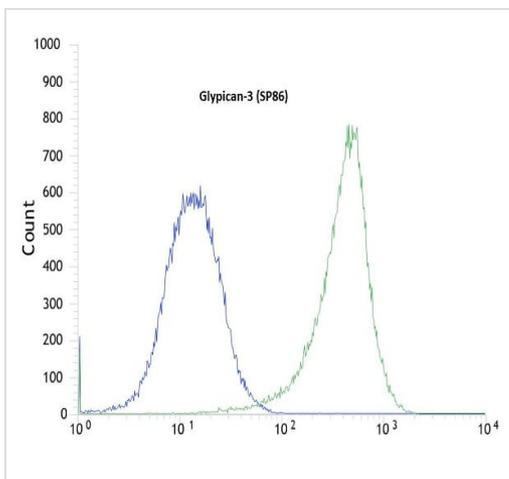
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab95363](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

Immunohistochemical staining of human liver hepatocellular carcinoma with [ab95363](#).

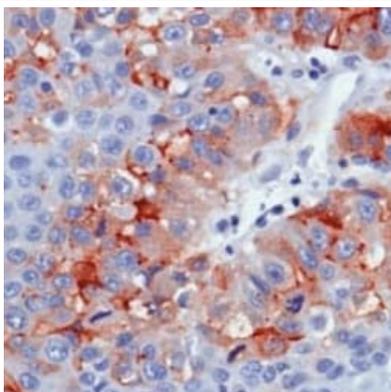
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab95363](#)).



Flow Cytometry - Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

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).

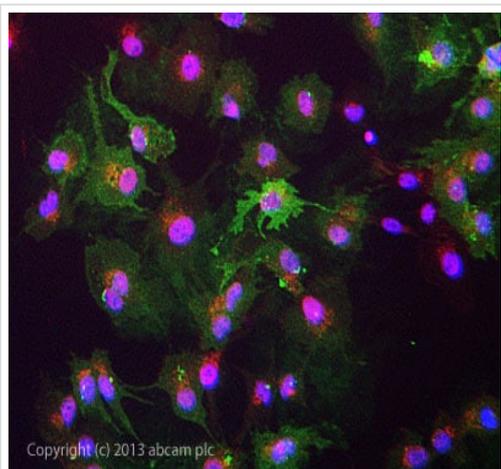
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab95363](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

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

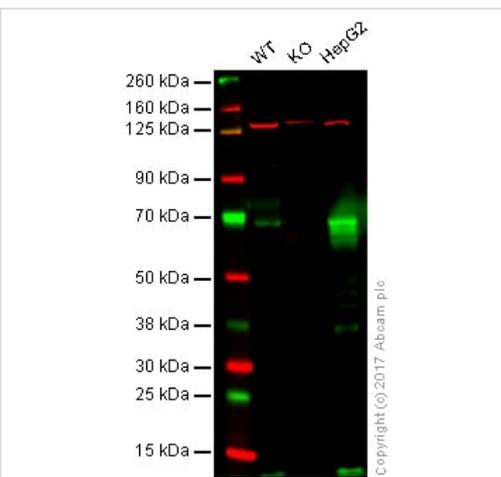
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab95363](#)).



Immunocytochemistry/ Immunofluorescence - Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab95363](#)).



Western blot - Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

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.

This data was developed using the same antibody clone in a

different buffer formulation containing PBS, BSA and sodium azide (ab95363).

Why choose a recombinant antibody?



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

Anti-Glypican 3 antibody [SP86] - BSA and Azide free (ab238804)

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

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