


## Product datasheet

### Anti-Glypican 3 antibody ab101478

KO VALIDATED

3 Images

#### Overview

|                     |   |
|---------------------|---|
| Product name        | Anti-Glypican 3 antibody  |
| Description         | Rabbit polyclonal to Glypican 3   |
| Host species        | Rabbit  |
| Tested applications | <b>Suitable for:</b> ICC/IF, WB   |
| Species reactivity  | <b>Reacts with:</b> Human<br><b>Predicted to work with:</b> Mouse, Rat, Cow, Chimpanzee   |
| Immunogen           | Synthetic peptide corresponding to Human Glypican 3 aa 100-200 conjugated to keyhole limpet haemocyanin.<br>(Peptide available as <a href="#">ab113760</a> )  |
| Positive control    | This antibody gave a positive signal in the following lysates: Human Kidney Tissue; Human Liver Tissue; HepG2 Whole Cell; HEK293 Whole Cell.  |
| 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&amp;As</p> |

#### Properties

|                      |  |
|----------------------|--|
| Form                 | Liquid   |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. |
| Storage buffer       | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituent: PBS   |

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

|                  |  |
|------------------|--|
|                  | scientific support team who will be happy to help. |
| <b>Purity</b>    | Immunogen affinity purified                        |
| <b>Clonality</b> | Polyclonal   |
| <b>Isotype</b>   | IgG  |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab101478 in the following tested applications.

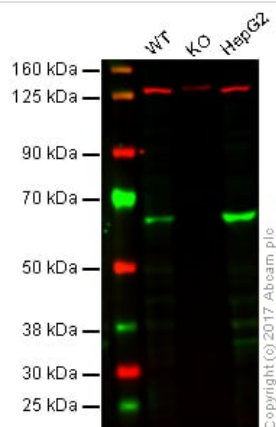
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes   |
|-------------|-----------|---|
| ICC/IF      |           | Use a concentration of 5 µg/ml.                                     |
| WB          |           | Use a concentration of 1 µg/ml. Predicted molecular weight: 66 kDa. |

## 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 (ab101478)

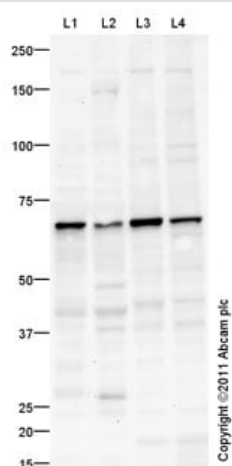
**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)

**Lane 2:** Glypican 3 knockout HAP1 whole cell lysate (20 µg)

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

**Lanes 1 - 3:** Merged signal (red and green). Green - ab101478 observed at 66 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab101478 was shown to specifically react with Glypican 3 in wild-type HAP1 cells as signal was lost in Glypican 3 knockout cells. Wild-type and Glypican 3 knockout samples were subjected to SDS-PAGE. ab101478 and **ab18058** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1 µg/ml 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.



Western blot - Anti-Glypican 3 antibody (ab101478)

**All lanes :** Anti-Glypican 3 antibody (ab101478) at 1 µg/ml

**Lane 1 :** Human kidney tissue lysate - total protein (**ab30203**)

**Lane 2 :** Human liver tissue lysate - total protein (**ab29889**)

**Lane 3 :** HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

**Lane 4 :** HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

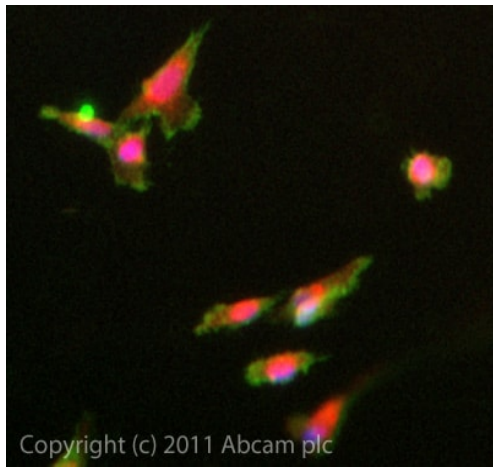
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 66 kDa

**Observed band size:** 66 kDa

**Exposure time:** 20 minutes



Immunocytochemistry/ Immunofluorescence - Anti-Glypican 3 antibody (ab101478)

ICC/IF image of ab101478 stained SKNSH 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 (ab101478, 5µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit 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.

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

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