

## Anti-Glypican 3/GPC3 Antibody Picoband™

Catalog Number: A01922-2

### About GPC3

Glypican-3 is a protein that, in humans, is encoded by the GPC3 gene. It is mapped to Xq26.2. Cell surface heparan sulfate proteoglycans are composed of a membrane-associated protein core substituted with a variable number of heparan sulfate chains. Members of the glypican-related integral membrane proteoglycan family (GRIPS) contain a core protein anchored to the cytoplasmic membrane via a glycosyl phosphatidylinositol linkage. These proteins may play a role in the control of cell division and growth regulation. The protein encoded by this gene can bind to and inhibit the dipeptidyl peptidase activity of CD26, and it can induce apoptosis in certain cell types. Deletion mutations in this gene are associated with Simpson-Golabi-Behmel syndrome, also known as Simpson dysmorphia syndrome. Alternative splicing results in multiple transcript variants.

### Overview

Product Name	Anti-Glypican 3/GPC3 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Glypican 3/GPC3 Antibody Picoband™ catalog # A01922-2. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P51654

### Technical Details

Immunogen	E.coli-derived human Glypican 3/GPC3 recombinant protein (Position: D32-A535).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.25-0.5ug/ml</p> <p>Flow Cytometry, 1-3ug/1x10<sup>6</sup> cells</p> <p>Direct ELISA, 0.1-0.5ug/ml</p>

## Anti-Glypican 3/GPC3 Antibody Picoband™ (A01922-2) Images

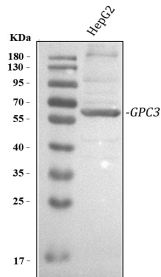


Figure 1. Western blot analysis of Glypican 3/GPC3 using anti-Glypican 3/GPC3 antibody (A01922-2).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Glypican 3/GPC3 antigen affinity purified polyclonal antibody (Catalog # A01922-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Glypican 3/GPC3 at approximately 66 kDa. The expected band size for Glypican 3/GPC3 is at 66 kDa.

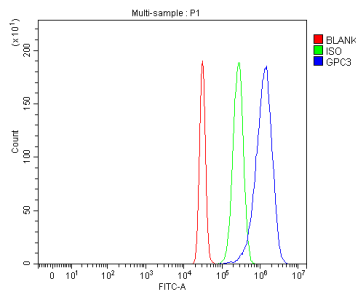


Figure 2. Flow Cytometry analysis of HepG2 cells using anti-Glypican 3/GPC3 antibody (A01922-2).

Overlay histogram showing HepG2 cells stained with A01922-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Glypican 3/GPC3 Antibody (A01922-2, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

**Submit a product review to Biocompare.com**

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Glypican 3/GPC3 Antibody™