

Product datasheet

Anti-Glypican 3 antibody [EPR20569] ab207080

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [4 References](#) [9 Images](#)

Overview

Product name	Anti-Glypican 3 antibody [EPR20569]
Description	Rabbit monoclonal [EPR20569] to Glypican 3
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt (Intra), IHC-P, ICC/IF, IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HepG2 and Huh7 whole cell lysates; Human fetal liver lysate. IHC-P: Human placenta and hepatocellular cancer tissues. ICC/IF: HepG2 cells. Flow Cyt (intra): HepG2 cells. IP: HepG2 whole cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20569

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab207080 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)	1/1000. Detects a band of approximately 40,70 kDa (predicted molecular weight: 65 kDa).
Flow Cyt (Intra)		1/500.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/500.
IP		1/40.

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.

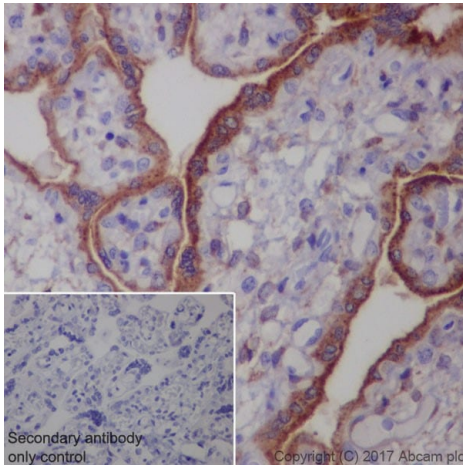
Sequence similarities

Belongs to the glypican family.

Cellular localization

Cell membrane and Secreted > extracellular space.

Images

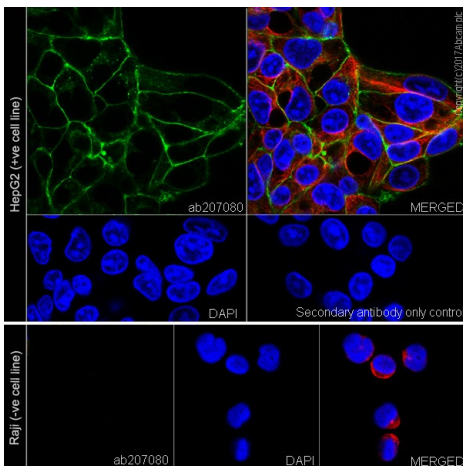


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [EPR20569] (ab207080)

Immunohistochemical analysis of paraffin-embedded human placenta tissue labeling Glypican 3 with ab207080 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on human placenta (PMID: 12788060; PMID: 11193214). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



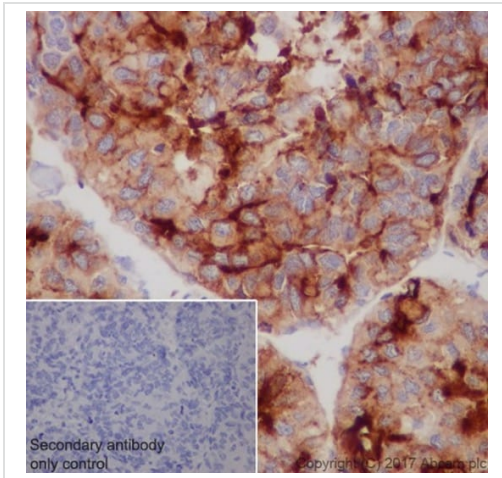
Immunocytochemistry/ Immunofluorescence - Anti-Glypican 3 antibody [EPR20569] (ab207080)

Immunofluorescent analysis of 100% methanol-fixed HepG2 (human liver hepatocellular carcinoma cell line) cells labeling Glypican 3 with ab207080 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining on HepG2 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.

Negative control: Raji (PMID: 9371521).

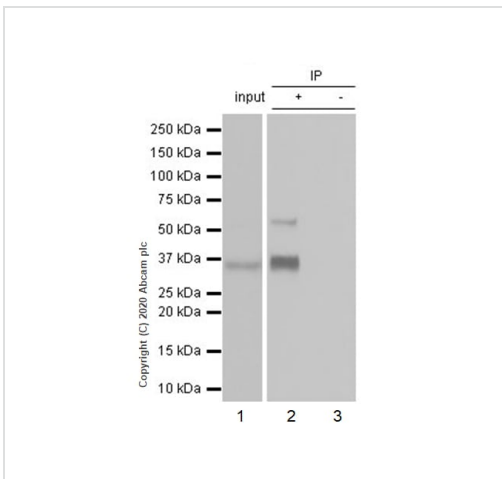


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [EPR20569] (ab207080)

Immunohistochemical analysis of paraffin-embedded human hepatocellular cancer tissue labeling Glypican 3 with ab207080 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on human hepatocellular cancer (PMID: 12788060). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Glypican 3 antibody [EPR20569] (ab207080)

Purified ab207080 at 1/40 dilution (2µg) immunoprecipitating Glypican 3 in HepG2 whole cell lysate.

Lane 1 (input): HepG2 (human hepatocellular carcinoma epithelial cell), whole cell lysate 10 µg

Lane 2 (+): ab207080 + HepG2 whole cell lysate.

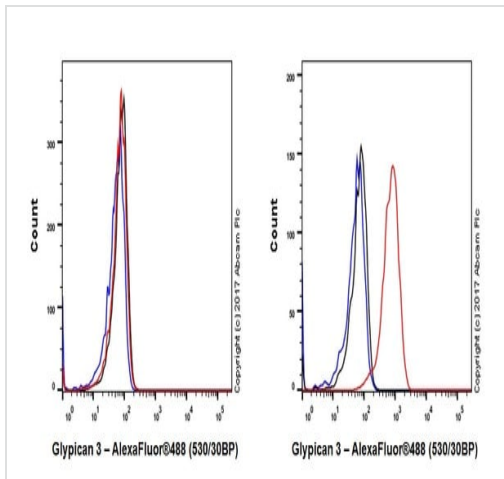
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab207080 in HepG2 whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/10,000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

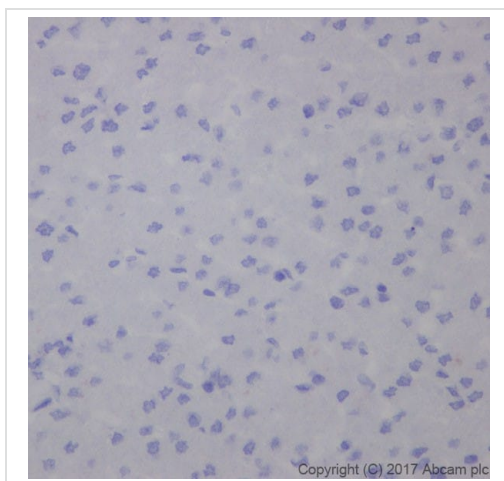
Observed band size: 40,70 kDa



Flow Cytometry (Intracellular) - Anti-Glypican 3 antibody [EPR20569] (ab207080)

Left panel - Negative control: Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed Raji (human Burkitt's lymphoma) cell line labeling Glypican 3 with ab207080 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) at 1/2000 dilution was used as the secondary antibody.

Right panel: Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HepG2 (human liver hepatocellular carcinoma cell line) cell line labeling Glypican 3 with ab207080 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) at 1/2000 dilution was used as the secondary antibody.



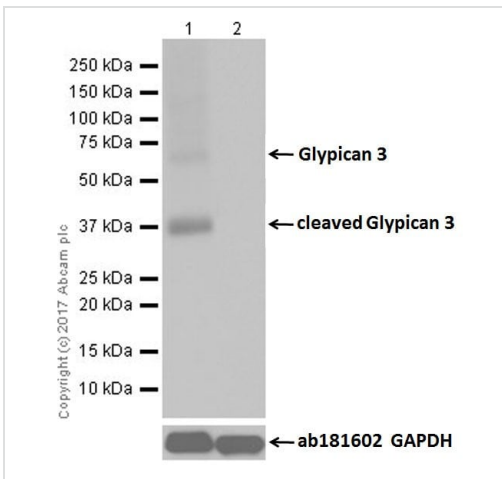
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glypican 3 antibody [EPR20569] (ab207080)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling Glypican 3 with ab207080 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Negative control: No staining on human liver (PMID: 12788060).

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Glypican 3 antibody [EPR20569] (ab207080)

All lanes : Anti-Glypican 3 antibody [EPR20569] (ab207080) at 1/1000 dilution

Lane 1 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

Lane 2 : Raji (human Burkitt's lymphoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Developed using the ECL technique.

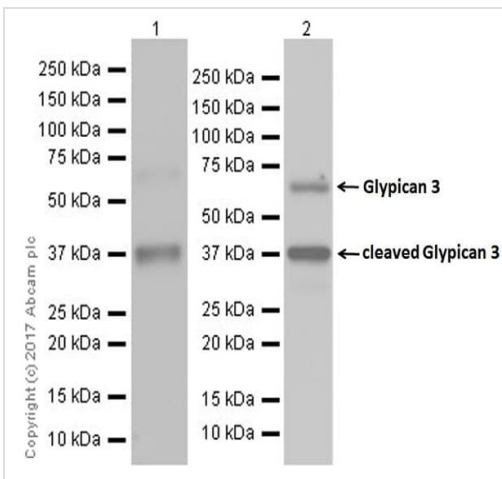
Predicted band size: 65 kDa

Observed band size: 40,70 kDa

Exposure time: 1 second

Blocking/Dilution buffer: 5% NFDM/TBST.

The observed molecular weight is consistent with the literature (PMID: 12851874; PMID: 25553423).



Western blot - Anti-Glypican 3 antibody [EPR20569] (ab207080)

All lanes : Anti-Glypican 3 antibody [EPR20569] (ab207080) at 1/1000 dilution

Lane 1 : Huh7 (human hepatocellular carcinoma epithelial cell line) whole cell lysate

Lane 2 : Human fetal liver lysate

Lysates/proteins at 20 µg per lane.

Secondary

Lane 1 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Lane 2 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Developed using the ECL technique.

Predicted band size: 65 kDa


Observed band size: 40,70 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1: 3 minutes; Lane 2: 1 minute.

The observed molecular weight is consistent with the literature (PMID: 12851874; PMID: 25553423).

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 [EPR20569] (ab207080)

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

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