

Anti-Glypican 3 Antibody

Catalog # AP95843

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	P51654
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	65563

Additional Information

Gene ID	2719
Other Names	OCI5; GlypIC, an-3; GTR2-2; Intestinal protein OCI-5; MXR7
Target/Specificity	Recombinant fusion protein of human Glypican 3 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	GPC3
Synonyms	OCI5
Function	Cell surface proteoglycan (PubMed: 14610063). Negatively regulates the hedgehog signaling pathway when attached via the GPI- anchor to the cell surface by competing with the hedgehog receptor PTC1 for binding to hedgehog proteins (By similarity). Binding to the hedgehog protein SHH triggers internalization of the complex by endocytosis and its subsequent lysosomal degradation (By similarity). Positively regulates the canonical Wnt signaling pathway by binding to the Wnt receptor Frizzled and stimulating the binding of the Frizzled receptor to Wnt ligands (PubMed: 16227623 , PubMed: 24496449). Positively regulates the non-canonical Wnt signaling pathway (By similarity). Binds to CD81 which decreases the availability of free CD81 for binding to the transcriptional repressor HHEX, resulting in nuclear translocation of HHEX and transcriptional repression (By similarity). Inhibits the dipeptidyl peptidase activity of DPP4 (PubMed: 17549790). Plays a role in limb patterning and skeletal development by controlling the cellular response to BMP4 (By similarity). Modulates the effects of growth factors BMP2, BMP7 and FGF7 on renal branching morphogenesis (By similarity). Required for

coronary vascular development (By similarity). Plays a role in regulating cell movements during gastrulation (By similarity).

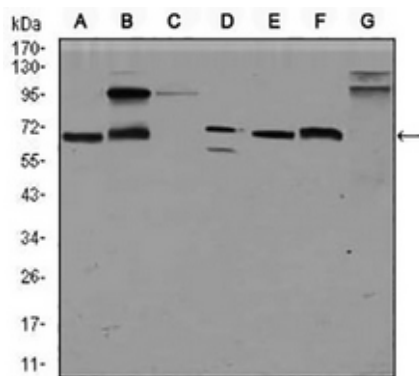
Cellular Location

Cell membrane; Lipid-anchor, GPI-anchor {ECO:0000250 | UniProtKB:P13265}; Extracellular side {ECO:0000250 | UniProtKB:P13265}

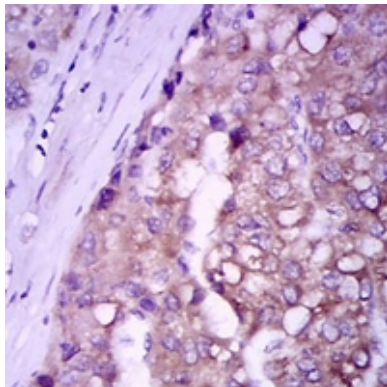
Tissue Location

Detected in placenta (at protein level) (PubMed:32337544). Highly expressed in lung, liver and kidney

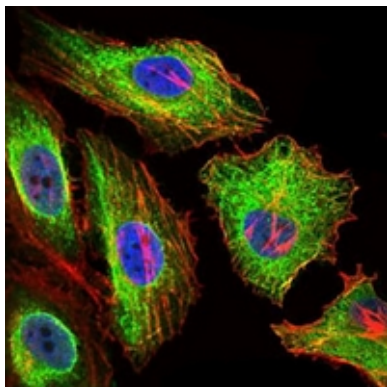
Images



Western blot analysis of Glypican 3 expression in HepG2 (A), HEK293 (B), Jurkat (C), SKNSH (D), PC12 (E), F9 (F), mouse liver (G) whole cell lysates. (Predicted band size: 66 kD; Observed band size: 66 kD)

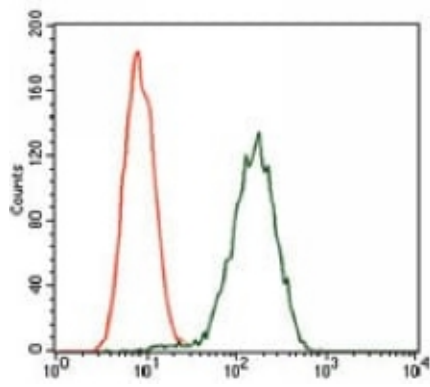


Immunohistochemical analysis of Glypican 3 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Glypican 3 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Flow cytometric analysis of Jurkat cells using Anti-Glypican 3 Antibody (green) and negative control (red).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.