

MONOCLONAL ANTIBODY

Anti-Glypican 1 (Human) mAb

Code No.	Clone	Subclass	Quantity	Concentration
W253-3	12C1E2F	Mouse IgG1 κ	100 μ L	1 mg/mL

BACKGROUND: Glypican 1 (GPC1) is a member of cell surface heparan sulfate proteoglycan family. GPC1 is a GPI-anchored type membrane protein and probably involves in the control of cell division and growth regulation. GPC1 also associates with fibrillar APP A-beta peptides in lipid rafts in Alzheimer disease brains. In pancreatic ductal adenocarcinoma, enhanced GPC1 expression is suggested to correlate with BMP and activin receptors. Down-regulation of GPC1 results in suppression of pancreatic cancer cell growth.

SOURCE: This antibody was purified from hybridoma culture supernatant by Protein A affinity column chromatography.

IMMUNOGEN: Human Glypican 1 expressed Ba/F3 transfectants generated from SST-REX (signal sequence trap by retrovirus-mediated expression screening).

FORMULATION: 100 μ g IgG in 100 μ L volume of PBS containing 50% glycerol, pH 7.2. No preservative is contained.

STORAGE: This antibody solution is stable for one year from the date of purchase when stored at -20°C .

REACTIVITY: This antibody reacts with human Glypican 1 on Flow cytometry.

APPLICATIONS:

Flow cytometry: 1-10 μ g/mL

Western blotting: Not tested

Immunoprecipitation: Not tested

Immunohistochemistry: Not tested

Immunocytochemistry: Not tested

Detailed procedure is provided in the following **PROTOCOL**.

INTENDED USE:

For Research Use Only. Not for use in diagnostic procedures.

Entrez Gene ID:

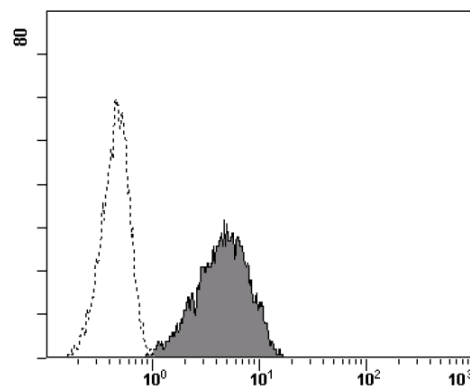
2817 (Human)

SPECIES CROSS REACTIVITY:

Species	Human	Mouse	Rat	Hamster
Cells	Transfectant	Not tested	Not tested	Not tested
Reactivity on FCM	+			

REFERENCES:

- 1) Cheng, F., *et al.*, *J. Biol. Chem.* **286**, 27559-27572 (2011)
- 2) Svensson, G. and Mani, K., *Glycoconj. J.* **26**, 1247-1257 (2009)
- 3) Mani, K., *et al.*, *Glycobiology* **16**, 1251-1261 (2006)
- 4) Watanabe, N., *et al.*, *FASEB J.* **18**, 1013-1015 (2004)
- 5) Kojima, T and Kitamura, T. *Nat. Biotechnol.* **17**, 487-490 (1999)
- 6) Vermeesch, S. A., *et al.*, *Genomics* **25**, 327-329 (1995)
- 7) David, G., *et al.*, *J. Cell Biol.* **111**, 3165-3176 (1990)



Flow cytometric analysis of human Glypican 1 expression on Ba/F3 transfectant. Open histograms indicate the reaction of isotypic control to the cells. Shaded histograms indicate the reaction of W253-3 to the cells.

PROTOCOL:

Flow cytometric analysis for floating cells

We usually use Fisher tubes or equivalents as reaction tubes for all steps described below.

- 1) Wash the cells 3 times with washing buffer [PBS containing 2% fetal calf serum (FCS) and 0.05% NaN_3].
- 2) Resuspend the cells with washing buffer (2.5×10^6 cells/mL).
- 3) Add 200 μ L of cell suspension into each tube. And centrifuge at $500 \times g$ for 1 minute at room temperature

- (20~25°C). Remove supernatant by careful decantation.
- 4) Add 20 µL of Clear Back (human Fc receptor blocking reagent, MBL; code no. MTG-001) to the cell pellet after tapping. Mix well and incubate for 5 minutes at room temperature.
 - 5) Add 50 µL of the primary antibody at the concentration as suggest in the **APPLICATIONS** diluted in the washing buffer. Mix well and incubate for 30 minutes at room temperature.
 - 6) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful decantation.
 - 7) Add 50 µL of 1:200 anti-mouse IgG-PE (Beckman Coulter; code no. IM0855) diluted with the washing buffer. Mix well and incubate for 30 minutes at room temperature.
 - 8) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful decantation.
 - 9) Resuspend the cells with 500 µL of the washing buffer and analyze by a flow cytometer.

(Positive control for Flow cytometry; transfectant)

RELATED PRODUCTS:

W005-3	Anti-BTN2A1 (Human) mAb
W008-3	Anti-Carboxypeptidase D (Human) mAb
W011-3	Anti-Dystroglycan (Human) mAb
W017-3	Anti-EphA2 (Human) mAb
W029-3	Anti-IGFBP1 (Human) mAb
W050-3	Anti-RECK (Human) mAb
W086-3	Anti-LYPD3 (C4.4A) (Human) mAb
W089-3	Anti-C11orf24 (Human) mAb
W124-3	Anti-GPR56 (Human) mAb
W125-3	Anti-GPR56 (Human) mAb
W194-3	Anti-FAM171A1 (Human) mAb
W253-3	Anti-Glypican 1 (Human) mAb
W357-3	Anti-CD105 (Endoglin) (Human) mAb
W358-3	Anti-CD300A (Human) mAb
W359-3	Anti-CD300C (Human) mAb
M075-3	Mouse IgG1 (isotype control)
MTG-001	Clear Back (Human Fc receptor blocking reagent)