

PE anti-human Glypican-4 Antibody

Catalog# / Size	386405 / 25 tests
Clone	A21050B
Regulatory Status	RUO
Other Names	GPC4
Isotype	Mouse IgG2b, κ
Description	Glypican-4 is a cell surface heparan sulfate proteoglycan that contains a core protein anchored to the cytoplasmic membrane via a GPI anchor. Glypicans function as coreceptors for a variety of growth factors including Wnt, bone morphogenetic proteins (BMPs), fibroblast growth factors, and Hedgehog. In particular, Glypican-4 enhances the Wnt3a dependent β -catenin pathway and the Wnt5a-dependent non-canonical Wnt signaling. Glypican-4 plays a role in the control of cell division and growth regulation and is upregulated in pancreatic cancer and colorectal cancer where it is involved in promoting chemoresistance. Glypican-4 also regulates glutamatergic synapse formation and function in the developing brain.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	AA 23-529
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	This antibody blocks Glypican-4 mediated Wnt3a signaling <i>in vitro</i> at concentrations from 0.1 - 5.0 μ g/mL.

Antigen Details

Structure	Cell surface heparan sulfate proteoglycan
Distribution	Cell membrane and nucleoplasm

Function	Enhances Wnt signaling by acting as R-spondin co-receptor
Interaction	PICK1, Insulin Receptor, Wnt3a, FGF2
Ligand/Receptor	Wnt3a
Cell Type	Neurons
Biology Area	Cell Biology, Cell Proliferation and Viability, Neurodegeneration, Signal Transduction
Molecular Family	APP/A β Degradation
Antigen References	1. Sakane H, <i>et al.</i> 2012. <i>J Cell Sci.</i> 125:449-60. 2. Hagihara K, <i>et al.</i> 2000. <i>Developmental Dynamics.</i> 219:353-67. 3. Watanabe K, <i>et al.</i> 1995. <i>J Cell Biol.</i> 130:1207-18. 4. Ussar, S. <i>et al.</i> 2012. <i>Diabetes.</i> 61:2289-98.
Gene ID	2239

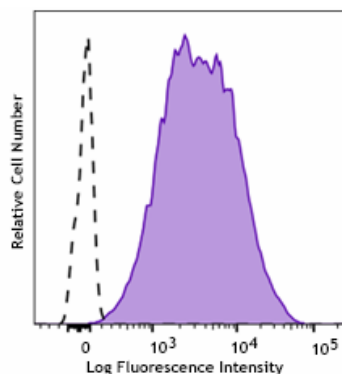
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Ultra-LEAF™ Purified anti-human Glypican-4, APC anti-human Glypican-4, Alexa Fluor® 647 anti-human Glypican-4 Antibody, PE anti-human Glypican-4

Product Data



The human HAP1-WT cell line was stained with anti-human Glypican-4 (clone A21050B) PE (filled histogram) or mouse IgG2b, κ PE isotype control (open histogram).

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