

Alexa Fluor® 647 anti-human Glypican-4 Antibody

Catalog# / Size	386409 / 25 tests 386410 / 100 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 Alexa Fluor® 647 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 μL per million cells in 100 μL staining volume or 5 μL per 100 μL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 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.
RRID	AB_3720723 (BioLegend Cat. No. 386409) AB_3720723 (BioLegend Cat. No. 386410)

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, *et al.* 2012. *J Cell Sci.* 125:449-60.
2. Hagihara K, *et al.* 2000. *Developmental Dynamics.* 219:353-67.
3. Watanabe K, *et al.* 1995. *J Cell Biol.* 130:1207-18.
4. Ussar, S. *et al.* 2012. *Diabetes.* 61:2289-98.

Gene ID [2239](#)

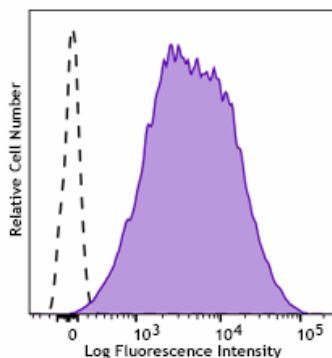
Related Protocols

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

Other Formats

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

Product Data



Human cell line, HAP1-WT, was stained with anti-human Glypican-4 (clone A21050B) Alexa Fluor® 647 (filled histogram) or mouse IgG2b, κ Alexa Fluor® 647 isotype control (open histogram).

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