



Qty: 100 µg/200 µL

Mouse anti-A2B5

Catalog No. 433110

Mouse anti-A2B5

FORM

This affinity-purified mouse monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from tissue culture supernatant using IgM purification column.

Clone: 105

Isotype: IgM

IMMUNOGEN

Chicken embryo retina cells.

SPECIFICITY

This antibody is specific for ganglioside GQ1c from multiple species.³

REACTIVITY

Reactivity has been confirmed with mouse GRIP-cells (Glial restricted immortalized precursor –cells) using Flow Cytometry.

Sample	Immunocytochemistry	Immunohistochemistry	Flow Cytometry
Human	ND	+++ ²	+++ ²
Chicken	+++ ¹	+++	+++
Monkey (Rhesus)	ND	+++	+++
Mouse	ND	+++	+++
Rat	ND	+++ ⁴	+++
Dog	ND	+++	+++
Rabbit	ND	+++	+++

(Excellent +++, Good ++, Poor +, No reactivity 0, Not applicable N/A, Not determined ND)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting:	Not applicable
Immunoprecipitation:	Not applicable
Immunocytochemistry:	2-4 µg/mL
Immunohistochemistry (frozen):	2-5 µg/mL
Flow Cytometry:	0.5-1 µg/test

(cont')

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PI433110

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STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

BACKGROUND

Antibody A2B5 was generated by immunizing mice with chicken embryo retina cells. This antibody binds to neural tissue such as retina, brain, spinal cord, and dorsal root ganglia.¹ It is also able to bind plasma membranes of human, rat, chicken and mouse islet cells and can be used in cell sorting.² A more detailed analysis of the antigen recognized by A2B5 showed that it is recognizing ganglioside GQ1c (but not GQ1b, nor other glycolipids such as GM1, GD1a, GD1b, GT1a, GT1b and GA1).³ This ganglioside marker has also been utilized in recognition of putative oligodendrocyte progenitor cells and A2B5-positive astrocytes in adult human white matter.⁵

REFERENCES

1. Eisenbarth GS, Walsh FS, Nirenberg M. Monoclonal antibody to a plasma membrane antigen of neurons. *Proc Natl Acad Sci U S A*. 1979 Oct;76(10):4913-7.
2. Eisenbarth GS, Shimizu K, Bowring MA, Wells S. Expression of receptors for tetanus toxin and monoclonal antibody A2B5 by pancreatic islet cells. *Proc Natl Acad Sci U S A*. 1982 Aug;79(16):5066-70.
3. Kasai N, Yu RK. The monoclonal antibody A2B5 is specific to ganglioside GQ1c. *Brain Res*. 1983 Oct 24;277(1):155-8.
4. Azuma T, Kawai K, Walsh JH. Immunocytochemical characterization of monoclonal antibody A2B5 in the rat gastric antrum. *Gastroenterol Jpn*. 1987 Dec;22(6):685-9.
5. Scolding NJ, Rayner PJ, Compston DA. Identification of A2B5-positive putative oligodendrocyte progenitor cells and A2B5-positive astrocytes in adult human white matter. *Neuroscience*. 1999 Mar;89(1):1-4.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose 4B	10-1041
rec-Protein G	Sepharose 4B	10-1241
ZyMAX™ Goat anti-rabbit IgG	Unconjugated	81-6100
ZyMAX™ Goat anti-mouse IgG	Unconjugated	81-6500

Secondary antibody conjugates.

Conjugate	Goat anti-rabbit IgG (H+L)	Goat anti-mouse IgG (H+L)	Ex/Em*	Fluorescence similar to--
Alexa Fluor® 488	A11008	A11001	495/519	FITC
Alexa Fluor® 555	A21428	A21422	555/565	Cy3
Alexa Fluor® 594	A11012	A11005	590/617	Texas Red
Alexa Fluor® 647	A21244	A21235	650/668	Cy5
HRP	81-6120	81-6520	NA**	NA
AP	81-6122	81-6522	NA	NA
Biotin	B2770	B2763	NA	NA

*Excitation/emission (nm); **Not applicable

For additional secondary antibody conjugates, visit www.invitrogen.com/antibodies

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