www.antibodiesinc.com
orders@antibodiesinc.com
530-758-4400

PRODUCT DATASHEET

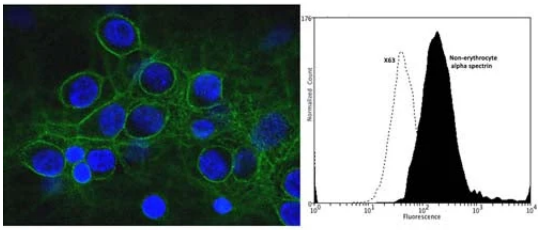
Anti-Spectrin alpha chain, non-erythrocytic 1 Antibody

Product Details

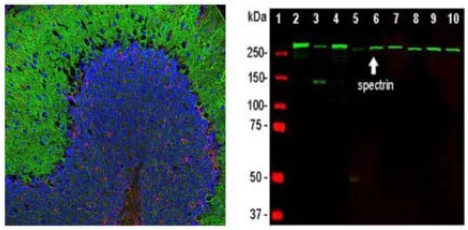
Available Variants	100 µg (SKU:M-1575-100)
Conjugate	Unconjugated
Isotype	IgG1
Clone	3D7
Host Species	Mouse
Format	Affinity-purified
Physical State	Lyophilized
Buffer	Lyophilized from PBS buffer pH 7.2-7.6 with 0.1% trehalose, and sodium azide
Production Notes	Protein G purified
Applications	Flow, ICC, IHC, WB
Dilution Ranges	WB: 1:5000-1:10000 IHC: 1:1000-1:2000 ICC: 1:1000-1:2000
Species Reactivity	Bovine, Human, Mouse, Pig, Rat
Immunogen	This antibody was raised against a recombinant construct containing the seventh, eight and ninth repeats (amino acids 676-1043) of human alpha-II Spectrin. The 9th spectrin repeat also includes a Src-homology 3 domain. This construct was expressed in and purified from E. coli.
Specificity	Human; bovine; porcine; rat;.
Molecular Weight	240 kDa
Storage	Spin vial briefly before opening. Reconstitute with 100 µL sterile-filtered, ultrapure water to achieve a 1 mg/mL concentration. Centrifuge to remove any insoluble material. Aliquot and store at -20°C for a higher stability and at 2-8°C with an appropriate antibacterial agent. Avoid freeze-thaw cycles.

UniProt ID	Q13813
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.

Product Images



Left: Confocal image of mixed neuron-glial cultures stained with Mouse monoclonal antibody to non-erythrocyte alpha-spectrin M-1575-100 (green) and counterstained for DNA (blue). M-1575-100 stains numerous axonal and dendritic profiles in these cultures, and this image shows an optical section through a group of neuronal cell bodies. M-1575-100 clearly reveals the submembraneous cytoskeleton. Since alpha-II spectrin is specific for neurons in the CNS, the glial cells in this culture are not recognized by this antibody. This antibody also reveals the submembranous cytoskeleton of the axon. **Right:** Analysis of non-erythrocyte alpha spectrin expression in human neuroblastoma SH-SY5Y cell line by Flow Cytometry. Fixing and Permeabilization of cells: Absolute methanol (10 minutes in ice) and 0.1% Tween-20 in PBS, Blocking: 1% BSA, Primary antibody: Mouse Monoclonal antibody to Non-erythrocyte alpha spectrin (cat # M-1575-100, 2 µg per ~10^6 cells) for 30 minutes at room temperature, Secondary antibody: Goat anti-mouse PE labeled secondary antibody (1:100 fold dilution) with incubation for 20 minutes in dark at room temperature. Non-specific Control IgG, clone X63 (cat # M-1249-100) was used as negative control under same conditions (black dashed). Flow cytometry data and results were generated using Orflo MoxiflowTM instrument and protocols.



Left: Rat cerebellum stained for alpha II spectrin (green, 1:2,000) and GFAP (C-1373-50, red, 1:5,000). The spectrin antibody stains the submembraneous cytoskeleton on neurons and strongly reveals the cell bodies and dendrites of Purkinje cells, while the GFAP antibody stains the processes of Bergmann glia and astrocytes. **Right: Western blot** analysis of spectrin expression (green) in neural tissue and cell lysates. [1] protein standard, [2] rat whole brain, [3] rat spinal cord, [4] mouse whole brain, [5] mouse spinal cord, [6] NIH-3T3, [7] HEK293, [8] HeLa, [9] SH-SY5Y, [10] C6 glioma cells. A prominent band at about 250-260 kDa represents the intact alpha II spectrin heavy chain.