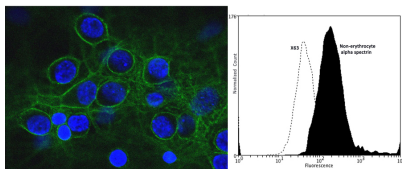


## Mouse monoclonal antibody to non-erythrocyte alpha-spectrin [3D7]: Affinity purified

<b>Catalogue No.:</b>	M-1575-100
<b>Description:</b>	Spectrins are a family of filamentous cytoskeletal proteins that function as essential scaffold proteins that stabilize the plasma membrane and organize intracellular organelles. The Spectrins form into dimers and further into tetramers of alpha and beta subunits (Ref: Entrez Gene). The alpha-II subunit is widely expressed in tissues but, in the nervous system, is found predominantly in neurons.
<b>Batch No.:</b>	See product label
<b>Unit size:</b>	100 ug
<b>Antigen:</b>	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.
<b>Antibody Type:</b>	monoclonal
<b>Isotype:</b>	IgG1
<b>Clone:</b>	3D7
<b>Other Names:</b>	SPTAN1; alpha II spectrin; alpha Fodrin; Spectrin, non-erythroid alpha chain; SPTA2;
<b>Accession:</b>	Q13813 SPTA2_HUMAN;
<b>Produced in:</b>	Mouse
<b>Applications:</b>	WB, ICC and IHC. Recommended dilution of 1:1,000-1:2,000 for ICC and IHC, and 1:5,000-10,000 for WB. The protein is seen as a major band at 240 kDa depending on the species. Optimal concentrations/dilutions should be determined by the end-user.
<b>Cross-reactivity:</b>	Human; bovine; porcine; rat; mouse
<b>Form:</b>	Lyophilised with 5% trehalose
<b>Reconstitution:</b>	Reconstitute in sterile distilled water. Centrifuge to remove any insoluble material.
<b>Storage:</b>	Aliquot and store at -20C for a higher stability and at 2-8C with an appropriate antibacterial agent. Avoid freeze-thaw cycles.
<b>Expiry Date:</b>	12 months after purchase



Left: Confocal image of mixed neuron-glia 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 submembrane 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 submembrane 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,

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## **Mouse monoclonal antibody to non-erythrocyte alpha-spectrin [3D7]: Affinity purified**

Blocking: 1% BSA, Primary antibody: Mouse Monoclonal antibody to Non-erythrocyte alpha spectrin (cat # M-1575-100, 2  $\mu$ g per  $\sim 10^6$  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 Moxiflow<sup>TM</sup> instrument and protocols.

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