ARG52218
anti-alpha II Spectrin antibody [3D7]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [3D7] recognizes alpha II Spectrin
Tested Reactivity	Hu, Ms, Rat, Bov
Tested Application	IHC-Fr, WB
Host	Mouse
Clonality	Monoclonal
Clone	3D7
Isotype	IgG1
Target Name	alpha II Spectrin
Species	Human
Immunogen	Recombinant contstruct containing the 7th, 8th, 9th repeats of human alpha II spectrin
Conjugation	Un-conjugated
Alternate Names	Spectrin alpha chain, non-erythrocytic 1; SPTA2; Fodrin alpha chain; EIEE5; NEAS; Alpha-II spectrin; Spectrin, non-erythroid alpha subunit

Application Instructions

Application table

Application	Dilution
IHC-Fr	1:500
WB	1:3000

Application Note: Specific for the ~240 k alpha II spectrin protein.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

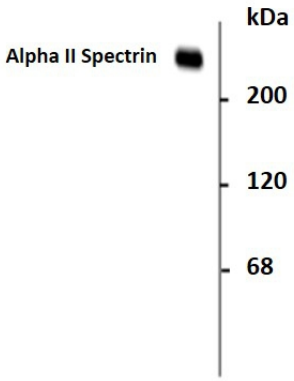
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	PBS and 10 mM Sodium azide
Preservative	10 mM Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

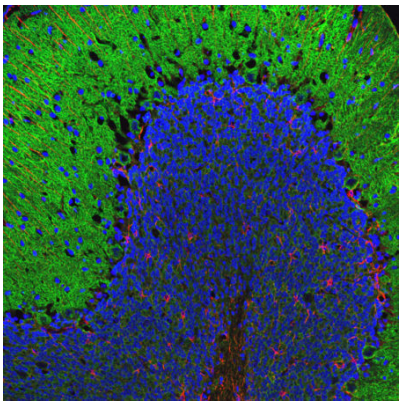
Gene Symbol	SPTAN1
Gene Full Name	spectrin, alpha, non-erythrocytic 1
Background	The spectrin family of cytoskeletal proteins is comprised of 2 alpha genes (α1 and α2) and five beta genes (β1-β5). Spectrins have been shown to function as scaffolding proteins in mechanical support of the plasma membrane as well as bind other membrane proteins and lipids (Bennett and Baines 2001). Defects in spectrin genes have been linked to some forms of hereditary spherocytosis, a type of auto-hemolytic anemia which is characterized by spherical red blood cells that are more prone to lysis (Eber and Lux 2004).
Research Area	Controls and Markers antibody; Signaling Transduction antibody
Calculated Mw	285 kDa
PTM	Phosphorylation of Tyr-1176 decreases sensitivity to cleavage by calpain in vitro.

Images



ARG52218 anti-alpha II Spectrin antibody [3D7] WB image

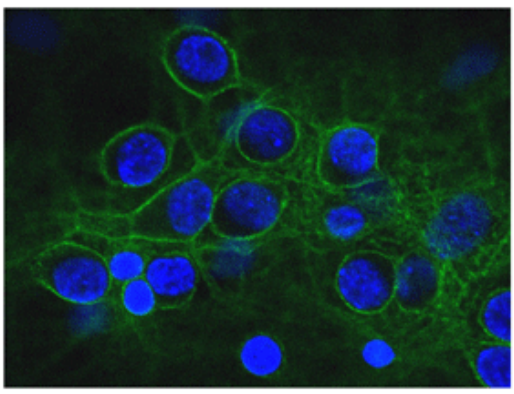
Western blot: Rat hippocampal lysate showing specific immunolabeling of the ~240k alpha II spectrin stained with ARG52218 anti-alpha II Spectrin antibody [3D7].



ARG52218 anti-alpha II Spectrin antibody [3D7] IHC-Fr image

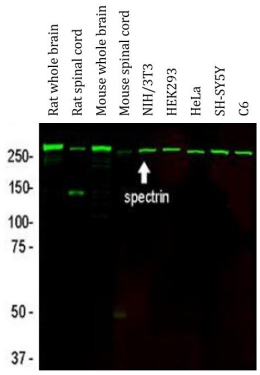
Immunohistochemistry: Frozen section of Rat cerebellum tissue stained with ARG52218 anti-alpha II Spectrin antibody [3D7] (green) at 1:2000 dilution, and costained with anti-GFAP antibody (red) at 1:5000 dilution.

Clone 3D7 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.



ARG52218 anti-alpha II Spectrin antibody [3D7] ICC/IF image

Immunofluorescence: cultured Rat neurons and glia stained with ARG52218 anti-alpha II Spectrin antibody [3D7] showing axonal and dendritic staining of alpha II spectrin (green) revealing the submembraneous cytoskeleton and DNA (blue).



ARG52218 anti-alpha II Spectrin antibody [3D7] WB image

Western blot: Rat whole brain, Rat spinal cord, Mouse whole brain, Mouse spinal cord, NIH/3T3, HEK293, HeLa, SH-SY5Y and C6 cell lysates stained with ARG52218 anti-alpha II Spectrin antibody [3D7] (green).