10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Anti-Alpha II Spectrin Antibody

Our Anti-Alpha II Spectrin primary antibody from PhosphoSolutions is mouse monoclonal. It detects bo
Catalog # AN1300

## Product Information

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|---|---|
| **Application** | WB, IHC, ICC |
| **Primary Accession** | Q13813 |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | IgG1 |
| **Clone Names** | 3D7 |
| **Calculated MW** | 284539 |

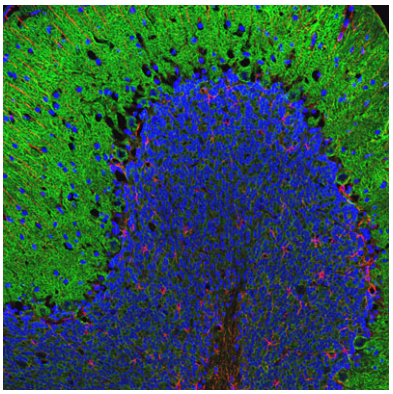
## Additional Information

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|---|---|
| **Gene ID** | 6709 |
| **Other Names** | (ALPHA)II-SPECTRIN antibody, Alpha-II spectrin antibody, brain antibody, EIEE5 antibody, 7738 antibody, FLJ44613 antibody, Fodrin antibody, Fodrin alpha chain antibody, Fodrin, alpha antibody, NEAS antibody, Non erythrocytic spectrin alpha antibody, non-erythroid alpha chain antibody, SPECA antibody, Spectrin alpha chain antibody, Spectrin alpha chain brain antibody, Spectrin alpha non erythrocytic 1 antibody, Spectrin antibody, Spectrin non erythroid alpha chain antibody, Spectrin, alpha, non-erythrocytic 1 (alpha-fodrin) antibody, Spectrin, nonerythroid, alpha subunit antibody, Spna2 antibody, SPTA 2 antibody, SPTA2 antibody, SPTA2_HUMAN antibody, SPTAN 1 antibody, SPTAN1 antibody |
| **Target/Specificity** | 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). |
| **Dilution** | WB~~1:1000 IHC~~1:100~500 ICC~~N/A |
| **Format** | Protein G Purified |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | Anti-Alpha II Spectrin Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |
| **Shipping** | Blue Ice |

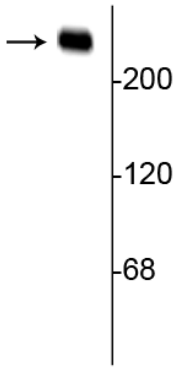
## Background

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).

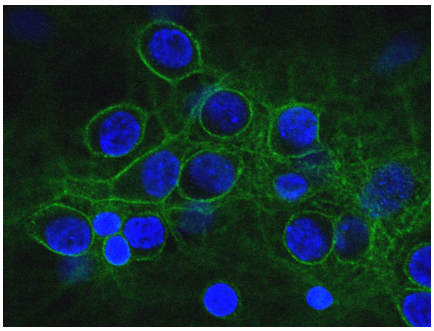
## Images



Immunofluorescence of a section of rat cerebellum selectively labeling the submembraneous cytoskeleton on neurons and cell bodies and dendrites of Purkinje cells with alpha-II-spectrin (cat. AN1300, 1:2000, green) and labeling the processes of Bergmann glia and astrocytes with anti-GFAP (cat. 621-GFAP, 1:5000, red).




Western blot of rat hippocampal lysate showing specific immunolabeling of the ~240 kDa alpha II spectrin protein.



Immunofluorescence of cultured neurons and glia cells showing specific axonal and dendritic labeling with anti-alpha-II-spectrin (cat. AN1300, 1:500, green), and nuclear staining with DAPI (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.