

## Product datasheet for **AM32996PU-N**

### SPTAN1 Mouse Monoclonal Antibody [Clone ID: 3D7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	3D7
Applications:	IF, WB
Recommended Dilution:	<b>Western Blot:</b> 1/3000. <b>Immunofluorescence:</b> 1/500.
Reactivity:	Bovine, Human, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant construct containing the seventh, eighth and ninth repeats of human alpha II spectrin expressed in and purified from E. Coli.
Specificity:	Specific for the ~240 k alpha II Spectrin protein.
Formulation:	PBS State: Aff - Purified State: Liquid purified IgG fraction from Tissue Culture Supernatant. Preservative: 10mM Sodium Azide
Purification:	Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	spectrin, alpha, non-erythrocytic 1
Database Link:	<a href="#">P07751</a>



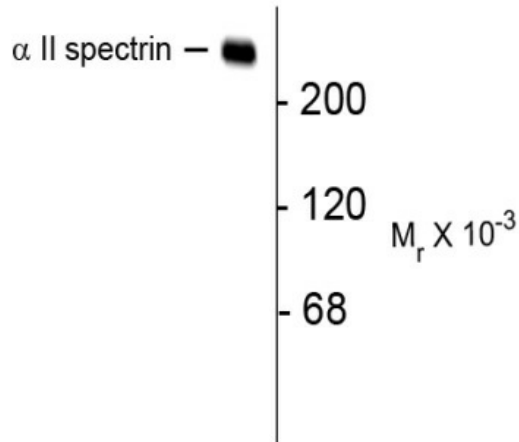
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**Background:**

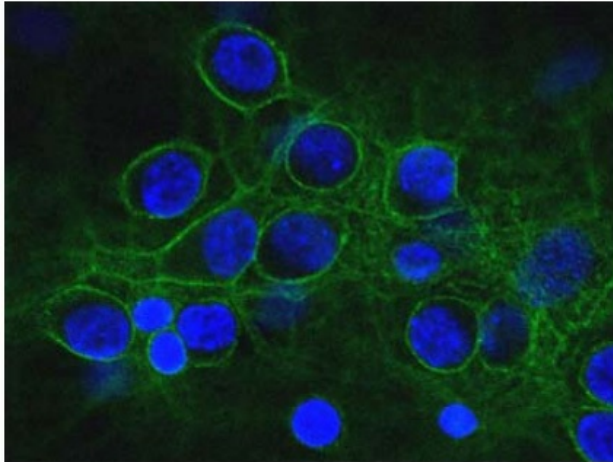
The spectrin family of cytoskeletal proteins is comprised of 2 alpha genes ( $\alpha 1$  and  $\alpha 2$ ) and five beta genes ( $\beta 1$ - $\beta 5$ ). Spectrins have been shown to function as scaffolding proteins in mechanical support of the plasma membrane as well as bind other membrane proteins 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).

**Synonyms:**

Spectrin non-erythroid alpha chain, Alpha-II spectrin, Fodrin alpha chain, SPTA2

**Product images:**


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



Immunofluorescence of cultured rat neurons and glia showing axonal and dendritic staining of alpha II spectrin (green) revealing the submembrane cytoskeleton and DNA (blue).