



alpha-II-Spectrin/alpha-Fodrin Data Sheet

Catalog Number:	RA22142	Host:	Rabbit
Product Type:	Rabbit Polyclonal	Species Reactivity:	Human, Rat, Mouse, Cow
Immunogen Sequence:	Recombinant constructs spanning most of human alpha-II spectrin expressed in and purified from E. coli	Format:	Antibody is supplied as an aliquot of serum plus 5mM NaN ₃
Applications:	Immunofluorescence: 1:500-1,000 Immunohistochemistry: 1:500-1,000 Western Blot: 1:2,000-5,000		
Storage:	Dilutions listed as a recommendation. Optimal dilution should be determined by investigator. Antibody can also be aliquotted and stored frozen at -20° C in a manual defrost freezer for six months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Avoid repeated freeze-thaw cycles.		

Application Notes

Description/Data

Spectrin family molecules are important high molecular weight components of the submembranous cytoskeleton of eukaryotic cells. These proteins were isolated originally from lysed red blood cell membrane preparations which were named "ghosts", which gave rise to the name spectrin. They function as major components of the membraneous cytoskeleton, mediating interactions between integral membrane proteins, actin and many other cellular components. This antibody binds specifically to all-spectrin, also known as non-erythroid spectrin or fodrin. In the CNS this protein is expressed only in neurons and so the antibody can be used to reveal the submembranous neuronal cytoskeleton in IF, ICC and IHC.

RA22142 was made against the recombinant human protein construct derived from the C-terminus of all-spectrin comprising the C-terminal 14 spectrin repeats, specifically amino acids 676-2447. This antibody can be used to study all-spectrin on western blots and to visualize the neuronal plasma membrane cytoskeleton in cells in culture and sectioned material.

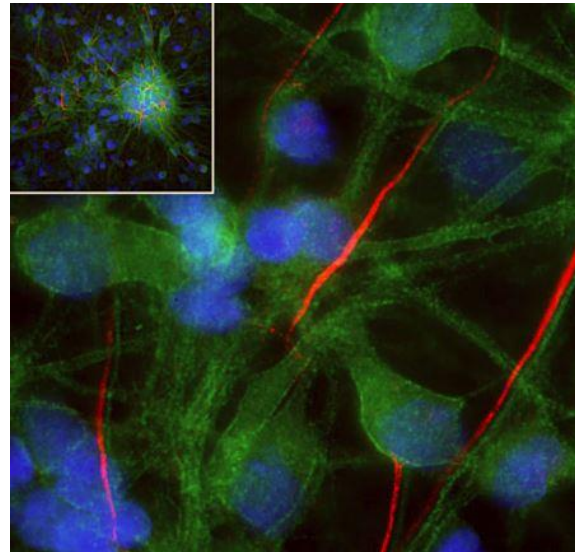


Image: Immunofluorescent analysis of cortical neuron-glia cell culture from E20 rat embryos stained with rabbit pAb to all-spectrin, RA22142, dilution 1:500 in green, and costained with mouse mAb to Ankyrin3 in red. The blue is Hoechst staining of nuclear DNA. The spectrin antibody stains submembranous cytoskeleton of neuronal cells. The Ankyrin3 antibody labels axonal initial segments of neurons.

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www.neuromics.com

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com