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Anti-αII-Spectrin , cleavage-specific Antibody

Catalog # AN1966

Product Information

Application	WB
Primary Accession	Q13813
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	284539

Additional Information

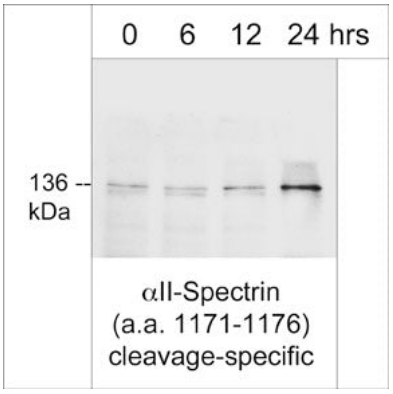
Gene ID	6709
Other Names	Alpha-II spectrin, Fodrin alpha chain, Spectrin, non-erythroid alpha subunit, SPTAN1, NEAS, SPTA2
Dilution	WB~~1:1000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-αII-Spectrin , cleavage-specific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

Spectrins are central components of the cytoskeleton that form a scaffold below the plasma membrane. Spectrins contain two subunits, α and β, which intertwine to form heterodimers that can self associate into elongated tetramers. α-spectrin I and β-spectrin I form heterodimers in red blood cells, while nonerythroid mammalian cells contain heterodimers of α-spectrin I and II with β-spectrin I to V. The structure of spectrins includes a succession of triple-helical repeats along with various domains, such as SH3 domain, EF hands, PH domains, and binding domains for ankyrin, actin, band 4.1, and calmodulin. α-spectrin II is a widely expressed non-erythroid spectrin that contains an SH3 domain, a calmodulin binding site, and two cleavage sites, one at Tyr-1176 for calpains and one at Asp-1185 for caspase-3. α-spectrin II and β-spectrin II, like many other spectrins, can form heterodimers that can self associate into tetramers, as well as interact with Band 4.1, F-actin, and other proteins near the plasma membrane.

Images

Western blot analysis of adult mouse diaphram treated with thapsigargin for 0, 6, 12, or 24 hours to induce cleavage of αII-spectrin from 250 kDa to 136 kDa. The blot was probed with rabbit polyclonal αII-spectrin (a.a.



1171-1176) cleavage-specific antibody at a dilution of 1:1,000 (Image provided by Dr. Leigh Ann Callahan, Department of Internal Medicine, University of Kentucky.)

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