

Anti-αll-Spectrin , cleavage-specific Antibody

Catalog # AN1966

Specification

Anti-αll-Spectrin , cleavage-specific Antibody - Product Information

| Primary Accession | |
|-------------------|--|
| Reactivity | |
| Host | |
| Clonality | |
| Isotype | |
| Calculated MW | |

<u>013813</u> Bovine Rabbit Rabbit Polyclonal IgG 284539

Anti-all-Spectrin , cleavage-specific Antibody - Additional Information

Gene ID 6709 Other Names Alpha-II spectrin, Fodrin alpha chain, Spectrin, non-erythroid alpha subunit, SPTAN1, NEAS, SPTA2

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- α II-Spectrin , cleavage-specific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

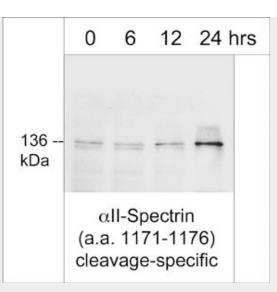
Anti-αll-Spectrin , cleavage-specific Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-αll-Spectrin , cleavage-specific Antibody - Images





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

Anti-αll-Spectrin , cleavage-specific Antibody - 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.