

Datasheet for ABIN968883

anti-SPTBN1 antibody (AA 2101-2189)

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Overview

Quantity:	150 µg
Target:	SPTBN1
Binding Specificity:	AA 2101-2189
Reactivity:	Human, Mouse, Rat, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SPTBN1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human beta-Spectrin II aa. 2101-2189
Clone:	42-B
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus), Dog (Canine)
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.4. Please refer to us for technical protocols.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	SPTBN1
Alternative Name:	beta-Spectrin II (SPTBN1 Products)
Background:	<p>Spectrins are central components of the cytoskeleton that form a scaffold below the plasma membrane. Spectrins contain two subunits, alpha and β, which intertwine to form heterodimers that can self associate into elongated tetramers. alpha-spectrin I and β-spectrin I form heterodimers in red blood cells, while nonerythroid mammalian cells contain heterodimers of alpha-spectrin I and II with β-spectrin I to V. The structure of spectrins includes a succession of triple-helical repeats alongwith various domains, such as SH3 domain, EF hands, PH domains, and binding domains for ankyrin, actin, band 4.1, and calmodulin. alpha-spectrin II is a widely expressed non-erythroid alpha-spectrin that contains an SH3 domain, a calmodulin binding site, and two cleavage sites for proteases, such as calpains and caspase-3. β-spectrin II is a widely expressed non-erythroid β-spectrin that contains a C-terminal region that interacts with alpha-spectrins and a PH domain. alpha-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. This scaffold of cytoskeletal and plasma membrane proteins is critical for the maintenance of cell structure.</p>
Molecular Weight:	280 kDa
Pathways:	Regulation of Actin Filament Polymerization , Protein targeting to Nucleus

Application Details

Comment:	Related Products: ABIN968537, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 μ g/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤ 0.09 % sodium azide.
Preservative:	Sodium azide

Handling

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store undiluted at -20° C.

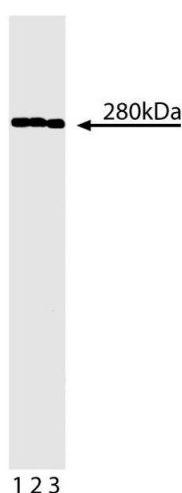
Publications

Product cited in: Nicolas, Fournier, Galand, Malbert-Colas, Bournier, Kroviarski, Bourgeois, Camonis, Dhermy, Grandchamp, Lecomte: "Tyrosine phosphorylation regulates alpha II spectrin cleavage by calpain." in: **Molecular and cellular biology**, Vol. 22, Issue 10, pp. 3527-36, (2002) ([PubMed](#)).

Hu, Watanabe, Bennett: "Characterization of human brain cDNA encoding the general isoform of beta-spectrin." in: **The Journal of biological chemistry**, Vol. 267, Issue 26, pp. 18715-22, (1992) ([PubMed](#)).

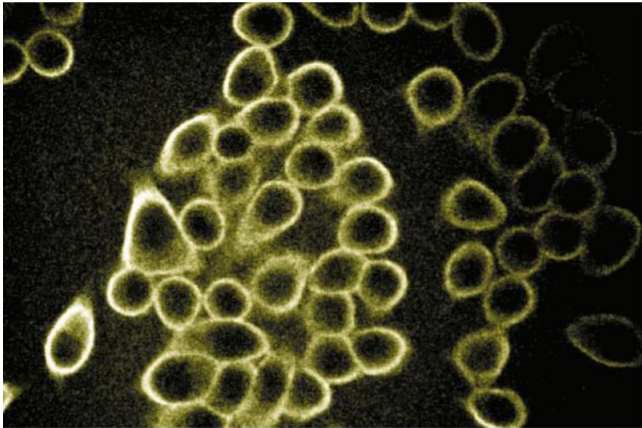
Moon, McMahon: "Generation of diversity in nonerythroid spectrins. Multiple polypeptides are predicted by sequence analysis of cDNAs encompassing the coding region of human nonerythroid alpha-spectrin." in: **The Journal of biological chemistry**, Vol. 265, Issue 8, pp. 4427-33, (1990) ([PubMed](#)).

Images



Western Blotting

Image 1. Western blot analysis of beta-Spectrin II on a Jurkat cell lysate (Human T-cell leukemia, ATCC TIB-152). Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti- beta-Spectrin II antibody.



Immunofluorescence

Image 2. Immunofluorescent staining of HeLa cells (Human cervical epitheloid carcinoma, ATCC CCL-2.2).



Western Blotting

Image 3.