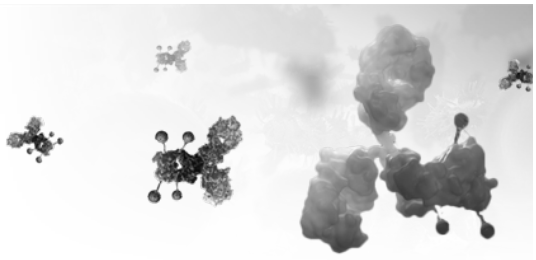

Mouse anti-Human α-Spectrin II monoclonal antibody, clone 46 (CABT-B9365)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Human α-Spectrin II aa. 252-371
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human, Dog, Chicken
Clone	46
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF
Format	Liquid
Concentration	250 μg/ml
Size	50 μg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	Spectrins are central components of the cytoskeleton that form a scaffold below the plasma

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	membrane. Spectrins contain two subunits, α and β, which intertwine to form heterodimers that can self associate into elongated tetramers. α-spectin I and β-spectrin I form heterodimers in red blood cells, while nonerythroid mammalian cells contain heterodimers of α-spectin 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 α-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 α-spectrins and a PH domain. 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. This scaffold of cytoskeletal and plasma membrane proteins is critical for the maintenance of cell structure.
Keywords	SPTA1; spectrin, alpha, erythrocytic 1; EL2; HPP; HS3; SPH3; SPTA; spectrin alpha chain, erythrocytic 1; alpha-I spectrin; elliptocytosis 2; erythroid alpha-spectrin; spectrin alpha chain, erythrocyte; spectrin, alpha, erythrocytic 1 (elliptocytosis 2);

GENE INFORMATION

Entrez Gene ID	6708
UniProt ID	P02549

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