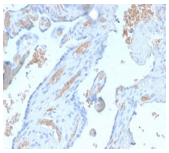
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Spectrin Alpha 1 Recombinant Monoclonal Rabbit Antibody (SPTA1/2939R)



Product Description

Spectrin is an actin crosslinking and molecular scaffold protein that links the plasma membrane to the actin cytoskeleton, and functions in the determination of cell shape, arrangement of transmembrane proteins, and organization of organelles. Spectrins function as membrane organizers and stabilizers, composed of non-homologous alpha and beta chains, which aggregate side-to-side in an anti-parallel fashion to form dimers, tetramers and higher polymers. Spectrin alpha I and spectrin beta I are present in erythrocytes, whereas spectrin alpha II (also designated fodrin alpha) and spectrin beta II (also designated fodrin beta) are present in other somatic cells. The spectrin tetramers in erythrocytes act as barriers to lateral diffusion, but spectrin dimers seem to lack this function.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2939, Anti-Spectrin Alpha 1 (SPTA1/2939R)

Product attributes

Antibody number	#2939
Antibody reactivity (target)	Spectrin Alpha 1
Antibody type	Primary
Host species	Rabbit
Clonality	Monoclonal, Recombinant Monoclonal
Clone	SPTA1/2939R
Isotype	IgG, kappa
Molecular weight of antigen	240 kDa
Synonyms	Alpha I spectrin; Elliptocytosis 2 (EL2); Erythrocyte alpha spectrin; Erythroid alpha-spectrin; HPP; HS3; Spectrin alpha erythrocytic 1; SPH3; SPTA1
Human gene symbol	SPTA1
Entrez gene ID	6708
SwissProt	P02549
Unigene	119825
Immunogen	Recombinant fragment of human SPTA (around aa356-475) (exact sequence is proprietary)
Antibody target cellular localization	Cytoskeleton
Verified antibody applications	IHC (FFPE) (verified), WB (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, ELISA: 2-4 ug/m for coating order Ab without BSA, Immunohistology (formalin): 1-2 ug/mL for 30 minutes at RT, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user
Positive control	Jurkat cells. Placenta or Tonsil.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cytoskeleton
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Cell/tissue expression	Red blood cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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