

# Spectrin Alpha 1 Monoclonal Mouse Antibody (SPTA1/1832)



## **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 <u>CF® Dye Brochure</u> 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1832, Anti-Spectrin Alpha 1 (SPTA1/1832)

### Call us : <u>800-304-5357</u>

#### Email: techsupport@biotium.com

#### Product attributes

Flouder attributes				
Antibody number	#1832			
Antibody reactivity (target)	Spectrin Alpha 1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	SPTA1/1832			
Isotype	IgG2b, kappa			
Molecular weight	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 human SPTA fragment (around aa356-475) (exact sequence is proprietary)			
Verified antibody applications	IHC (FFPE) (verified), WB (verified)			
Antibody target cellular localization	Plasma membrane			
Species reactivity	Human			
Positive control	K562; HeLa; Jurkat cells. Placenta or Tonsil.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ 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			
Validated in protein array	Monospecific			
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.			
Antibody research areas	Cytoskeleton			

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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

This datasheet was generated on August 26, 2025 at 06:30:11 PM. Visit product page to check for updated information before use. Product link: <u>https://biotium.com/product/spectrin-alpha-1-monoclonal-mouse-antibody-spta1-1832/</u>