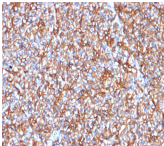


Spectrin Beta III Monoclonal Mouse Antibody (SPTBN2/1778)



Product Description

Spectrin is an actin binding protein that is a major component of the plasma membrane skeleton. Spectrins function as membrane organizers and stabilizers by forming dimers, tetramers and higher polymers. Vertebrate spectrins have two alpha-subunits (alpha-I/alpha-II), four beta-subunits (beta-I-beta-IV) and a beta-H subunit creating diversity and specialization of function. Spectrin α and spectrin β are present in erythrocytes, whereas spectrin α II (also designated fodrin α) and spectrin β I (also designated fodrin β) 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. Spectrin β III is highly homologous to both spectrin β I and spectrin β II. Spectrin β III is highly expressed in brain, kidney, pancreas and liver, and at lower levels in lung and placenta. Spectrin beta 3 is primarily expressed in nervous tissues with highest expression levels in the cerebellum, where it is found in Purkinje cell soma and dendrites. Primary antibodies are available purified, or with a selection of fluorescent CF \oplus dyes and other labels. CF \oplus dyes offer exceptional brightness and photostability. See the [CF \$\oplus\$ Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF \oplus 405S and CF \oplus 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 \oplus 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 1778, Anti-Spectrin Beta III (SPTBN2/1778)**

Product attributes

Antibody number	#1778
Antibody reactivity (target)	Spectrin Beta-III
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	SPTBN2/1778
Isotype	IgG1, kappa
Molecular weight	246 kDa
Synonyms	Beta III spectrin; SCA5; Spectrin beta chain brain 2; Spectrin beta non-erythrocytic 2; Spectrin non-erythroid beta chain 2; Spinocerebellar ataxia 5; SPTBN2
Human gene symbol	SPTBN2
Entrez gene ID	6712
SwissProt	O15020
Unigene	26915
Immunogen	Recombinant fragment (around aa356-475) of human SPTBN2 protein (exact sequence is proprietary)
Verified antibody applications	IF (verified), IHC (FFPE) (verified), WB (verified)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Positive control	PANC-1, HeLa, PC-3 cells. Brain, Pancreas or Liver.
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
Validated in protein array	Monospecific
Antibody research areas	Cytoskeleton

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF \oplus 405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF \oplus 488A	490/515	488	GFP, FITC
BNC68	CF \oplus 568	562/583	532, 561	RFP, TRITC
BNC94	CF \oplus 594	593/614	561	Texas Red \oplus
BNC40	CF \oplus 640R	642/662	633-640	Cy \oplus 5
BNC47	CF \oplus 647	650/665	633-640	Cy \oplus 5
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

Dye Features

- [CF \$\oplus\$ 405S Features](#)
- [CF \$\oplus\$ 488A Features](#)
- [CF \$\oplus\$ 568 Features](#)
- [CF \$\oplus\$ 594 Features](#)
- [CF \$\oplus\$ 640R Features](#)
- [CF \$\oplus\$ 647 Features](#)

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