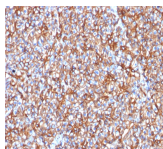


Spectrin Beta III Monoclonal Mouse Antibody (SPTBN2/1778)



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[®] 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 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 |
| 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 # 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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