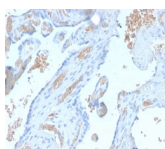


Spectrin Alpha 1 Recombinant Monoclonal Rabbit Antibody (SPTA1/2939R)



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 1 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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