

SBP Tag (SB19-C4): sc-101595

BACKGROUND

Streptavidin, a tetrameric protein purified from *Streptomyces avidinii*, binds very tightly to Biotin with a K_D of 10-14 mol/l, forming one of the strongest known biological and noncovalent interactions. Each monomer of Streptavidin binds one molecule of Biotin. The strong Streptavidin-Biotin bond can be used to "glue" various chemicals onto surfaces and to link together molecules such as radioisotopes and monoclonal antibodies. Streptavidin is widely utilized in scientific laboratories, commonly for the purification of immunochemistries, and it is one of the most important components in diagnostic and laboratory kits. SBP Tag (Streptavidin binding protein Tag) is a 38 amino acid protein affinity sequence that binds to Streptavidin and can be used for the detection and purification of a variety of recombinant proteins.

REFERENCES

1. Keefe, A.D., et al. 2001. One-step purification of recombinant proteins using a nanomolar-affinity Streptavidin-binding peptide, the SBP Tag. *Protein Expr. Purif.* 23: 440-446.
2. Pazy, Y., et al. 2002. Ligand exchange between proteins. Exchange of Biotin and Biotin derivatives between avidin and Streptavidin. *J. Biol. Chem.* 277: 30892-30900.

SOURCE

SBP Tag (SB19-C4) is a mouse monoclonal antibody raised against the streptavidin binding peptide.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SBP Tag (SB19-C4) is available conjugated to agarose (sc-101595 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-101595 PE), fluorescein (sc-101595 FITC), Alexa Fluor[®] 488 (sc-101595 AF488), Alexa Fluor[®] 546 (sc-101595 AF546), Alexa Fluor[®] 594 (sc-101595 AF594) or Alexa Fluor[®] 647 (sc-101595 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-101595 AF680) or Alexa Fluor[®] 790 (sc-101595 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SBP Tag (SB19-C4) is recommended for detection of SBP Tag by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

SELECT PRODUCT CITATIONS

1. Stowe, I.B., et al. 2012. A shared molecular mechanism underlies the human rasopathies Legius syndrome and Neurofibromatosis-1. *Genes Dev.* 26: 1421-1426.
2. Chen, D., et al. 2014. Three RNA binding proteins form a complex to promote differentiation of germline stem cell lineage in *Drosophila*. *PLoS Genet.* 10: e1004797.
3. Hsiao, J.J., et al. 2015. Androgen receptor and chemokine receptors 4 and 7 form a signaling axis to regulate CXCL12-dependent cellular motility. *BMC Cancer* 15: 204.
4. Mukherjee, S., et al. 2016. Phosphorylation of Ku70 subunit by cell cycle kinases modulates the replication related function of Ku heterodimer. *Nucleic Acids Res.* 44: 7755-7765.
5. Sudhaharan, T., et al. 2016. The Rho GTPase Rif signals through IRTKS, Eps8 and WAVE2 to generate dorsal membrane ruffles and filopodia. *J. Cell Sci.* 129: 2829-2840.
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7. Cai, N., et al. 2017. Mass spectrometric analysis of TRPM6 and TRPM7 phosphorylation reveals regulatory mechanisms of the channel-kinases. *Sci. Rep.* 7: 42739.
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RESEARCH USE

For research use only, not for use in diagnostic procedures.

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