SouthernBiotech

Streptavidin

Cat. No.	Format	Size
7100-01	Purified (UNLB)	5.0 mg
7100-01S	Purified (UNLB)	0.5 mg
7100-02	Fluorescein (FITC)	1.0 mg
7100-02S	Fluorescein (FITC)	0.5 mg
7100-03	Rhodamine (TRITC)	1.0 mg
7100-04	Alkaline Phosphatase (AP)	1.0 mL
7100-05	Horseradish Peroxidase (HRP)	1.0 mL
7100-06	β-galactosidase (BGAL)	1.0 mL
7100-07	Texas Red® (TXRD)	1.0 mg
7100-09L	R-phycoerythrin (PE)	1.0 mg
7100-09M	R-phycoerythrin (PE)	0.5 mg
7100-09S	R-phycoerythrin (PE)	0.1 mg
7100-10	R-phycoerythrin-Texas Red® (PE/TXRD)	0.1 mg

Cat. No.	Format	Size
7100-11L	Allophycocyanin (APC)	1.0 mg
7100-11M	Allophycocyanin (APC)	0.5 mg
7100-11S	Allophycocyanin (APC)	0.1 mg
7100-12	Cyanine 3 (CY3)	0.1 mg
7100-13L	Spectral Red® (SPRD)	0.5 mg
7100-13S	Spectral Red® (SPRD)	0.1 mg
7100-15	Cyanine 5 (CY5)	1.0 mg
7100-16L	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	0.5 mg
7100-16S	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	0.1 mg
7100-17L	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.5 mg
7100-17S	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg
7100-19L	Allophycocyanin-Cyanine 7 (APC/CY7)	0.5 mg
7100-19S	Allophycocyanin-Cyanine 7 (APC/CY7)	0.1 mg
7100-21	Cyanine 2 (CY2)	1.0 mg
7100-24	Cyanine 3.5 (CY3.5)	0.1 mg

Description

Specificity Biotin

Source *Streptomyces avidinii*

Applications

Quality tested applications include –

ELISA [1-7]
FLISA
FC [1,2,4,8-15]

Other referenced applications include –

ELISPOT [4,6-8]
IHC-FS [9,10,13,16-19]
IHC-PS [16,18,21]
ICC [11,17,19]
WB [3,5,20]
Multiplex [22]
Microarray [23]
Block [24]

Working Dilutions

Flow Cytometry	FITC, CY2, CY3, and CY3.5 conjugates	≤ 1 µg/10^6 cells
	PE, CY5, and PE/TXRD conjugates	≤ 0.2 µg/10^6 cells
	APC, SPRD and APC/CY7 conjugates	≤ 0.1 µg/10^6 cells
	PE/CY5.5 and PE/CY7 conjugates	≤ 0.01 µg/10^6 cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL	
FLISA	FITC, TRITC, TXRD, CY2, CY3, and CY3.5 conjugates	1:100 – 1:400
	PE, APC, and CY5 conjugates	≤ 1 µg/mL
ELISA	AP conjugate	1:2,000 – 1:4,000
	HRP conjugate	1:4,000 – 1:8,000
	BGAL conjugate	1:500
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Corporate Offices: 160 Oxmoor Blvd • Birmingham, AL 35209 • USA **Mailing Address:** P.O. Box 26221 • Birmingham, AL 35260 • USA
Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • **Fax:** 205.945.8768
Email: info@southernbiotech.com • **Website:** www.southernbiotech.com

Handling and Storage

- The purified (UNLB) streptavidin is supplied as 5.0 mg protein in 1.0 mL or 0.5 mg in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added*. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as either 0.5 mg in 0.5 mL or 1.0 mg in 1.0 mL of PBS/NaN_3. Store at 2-8°C.
- The rhodamine (TRITC), Texas Red® (TXRD), Cyanine 2 (CY2), and Cyanine 5 (CY5) conjugates are supplied as 1.0 mg in 1.0 mL PBS/NaN_3. Store at 2-8°C.
- The alkaline phosphatase (AP) conjugate is supplied as 1.0 mL of stock solution in 50 mM Tris/1 mM $MgCl_2$/50% glycerol, pH 8.0, containing NaN_3 as preservative. Store at 2-8°C or long-term at -20°C.
- The horseradish peroxidase (HRP) conjugate is supplied as 1.0 mL of stock solution in 50% glycerol/50% PBS, pH 7.4. *No preservative added.* Store at 2-8°C or long-term at -20°C.
- The β-galactosidase (BGAL) conjugate is supplied as 1.0 mL of stock solution in 50% glycerol/50% PBS containing NaN_3 as preservative. Store at 2-8°C or long-term at -20°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied 1.0 mg in 2.0 mL, 0.5 mg in 1.0 mL, or 0.1 mg in 0.2 mL of PBS/NaN_3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The R-phycoerythrin/Texas Red (PE/TXRD) conjugate is supplied as 0.1 mg in 0.2 mL of PBS/NaN_3 and a stabilizing agent. **Do not freeze!**
- The Spectral Red® (SPRD), R-phycoerythrin-Cyanine 7 (PE/CY7), R-phycoerythrin-Cyanine 5.5 (PE/CY5.5), and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 0.5 mg in 1.0 mL or 0.1 mg in 0.2 mL of PBS/NaN_3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Cyanine 3 (CY3) and Cyanine 3.5 (CY3.5) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN_3. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References

1. Hamilton AM, Kearney JF. Effects of IgM allotype suppression on serum IgM levels, B-1 and B-2 cells, and antibody responses in allotype heterozygous F1 mice. Dev Immunol. 1994;4:27-41. (ELISA, FC, IHC-FS)
2. Gulbranson-Judge A, Tybulewicz VL, Walters AE, Toellner K, MacLennan IC, Turner M. Defective immunoglobulin class switching in Vav-deficient mice is attributable to compromised T cell help. Eur J Immunol. 1999;29:477-87. (ELISA, FC)
3. Utani A, Nomizu M, Matsuura H, Kato K, Kobayashi T, Takeda U, et al. A unique sequence of the laminin α3 G domain binds to heparin and promotes cell adhesion through syndecan-2 and -4. J Biol Chem. 2001;276:28779-88. (ELISA, WB)
4. Taylor DK, Ito E, Thorn M, Sundar K, Tedder T, Spatz LA. Loss of tolerance of anti-dsDNA B cells in mice overexpressing CD19. Mol Immunol. 2006;43:1776-90. (ELISA, ELISPOT, FC)
5. Doern A, Cao X, Sereno A, Reyes CL, Altshuler A, Huang F, et al. Characterization of inhibitory anti-insulin-like growth factor receptor antibodies with different epitope specificity and ligand-blocking properties: implications for mechanism of action in vivo. J Biol Chem. 2009;284:10254-67. (ELISA, WB)
6. Vandenberg CJ, Josefsson EC, Campbell KJ, James C, Lawlor KE, Kile BT, et al. Loss of Bak enhances lymphocytosis but does not ameliorate thrombocytopaenia in BCL-2 transgenic mice. Cell Death Differ. 2014;21:676-84. (ELISA, ELISPOT)
7. Dunand CJ, Leon PE, Kaur K, Tan GS, Zheng N, Andrews S, et al. Preexisting human antibodies neutralize recently emerged H7N9 influenza strains. J Clin Invest. 2015;125:1255-68. (ELISA, ELISPOT)
8. Ju ZL, Shi GY, Zuo JX, Zhang JW, Sun J. Unexpected development of autoimmunity in BAFF-R-mutant MRL-lpr mice. Immunology. 2006;120:281-9. (ELISPOT, FC)
9. Kapasi ZF, Qin D, Kerr WG, Kosco-Vilbois MH, Shultz LD, Tew JG, et al. Follicular dendritic cell (FDC) precursors in primary lymphoid tissues. J Immunol. 1998;160:1078-84. (FC, IHC-FS)
10. Brakebusch C, Fillatreau S, Potocnik AJ, Bungartz G, Wilhelm P, Svensson M, et al. β1 integrin is not essential for hematopoiesis but is necessary for the T cell-dependent IgM antibody response. Immunity. 2002;16:465-77. (FC, IHC-FS)
11. Moura IC, Arcos-Fajardo M, Sadaka C, Leroy V, Benhamou M, Novak J, et al. Glycosylation and size of IgA1 are essential for interaction with mesangial transferrin receptor in IgA nephropathy. J Am Soc Nephrol. 2004;15:622-34. (FC, ICC)
12. Tsuneto M, Yamazaki H, Yoshino M, Yamada T, Hayashi S. Ascorbic acid promotes osteoclastogenesis from embryonic stem cells. Biochem Biophys Res Commun. 2005;335:1239-46. (FC, Sep)
13. Zotos D, Coquet JM, Zhang Y, Light A, D'Costa K, Kallies A, et al. IL-21 regulates germinal center B cell differentiation and proliferation through a B cell-intrinsic mechanism. J Exp Med. 2010;207:365-78. (FC, IHC-FS)
14. Thorum SC, Comstock SS, Hester SN, Shunk JM, Monaco MH, Donovan SM. Impact of diet on development of bronchial-associated immunity in the neonatal piglet. Vet Immunol Immunopathol. 2013;151:63-72. (FC)
15. Jung S, Schickel J, Kern A, Knapp A, Eftekhari P, Da Silva S, et al. Chronic bacterial infection activates autoreactive B cells and induces isotype switching and autoantigen-driven mutations. Eur J Immunol. 2016;46:131-46. (FC)
16. Nosanchuk JD, Valadon P, Feldmesser M, Casadevall A. Melanization of Cryptococcus neoformans in murine infection. Mol Cell Biol. 1999;19:745-50. (IHC-FS, IHC-PS)
17. Zannettino AC, Holding CA, Diamond P, Atkins GJ, Kostakis P, Farrugia A, et al. Osteoprotegerin (OPG) is localized to the Weibel-Palade bodies of human vascular endothelial cells and is physically associated with von Willebrand factor. J Cell Physiol. 2005;204:714-23. (IHC-FS, ICC)
18. Ji F, Liu Z, Cao J, Li N, Liu Z, Zuo J, et al. B cell response is required for granuloma formation in the early infection of Schistosoma japonicum. PLoS One. 2008;3(3):e1724. (IHC-FS, IHC-PS)
19. Piersma B, de Rond S, Werker PM, Boo S, Hinz B, van Beuge MM, et al. YAP1 is a driver of myofibroblast differentiation in normal and diseased fibroblasts. Am J Pathol. 2015;185:3326-37. (IHC-FS, ICC)
20. Ren B, Li J, Genschmer K, Hollingshead SK, Briles DE. The absence of PspA or presence of antibody to PspA facilitates the complement-dependent phagocytosis of pneumococci in vitro. Clin Vaccine Immunol. 2012;19:1574-82. (WB)
21. El Karoui K, Viau A, Dellis O, Bagattin A, Nguyen C, Baron W, et al. Endoplasmic reticulum stress drives proteinuria-induced kidney lesions via Lipocalin 2. Nat Commun. 2016;7:10330. (IHC-PS)
22. Piccioli D, Tavarini S, Borgogni E, Steri V, Nuti S, Sammicheli C, et al. Functional specialization of human circulating CD16 and CD1c myeloid dendritic-cell subsets. Blood. 2007;109:5371-9. (Multiplex)
23. Timmerman P, Barderas R, Desmet J, Altschuh D, Shochat S, Hollestelle MJ, et al. A combinatorial approach for the design of complementarity-determining region-derived peptidomimetics with in vitro anti-tumoral activity. J Biol Chem. 2009;284:34126-34. (Microarray)
24. Irie-Maezono R, Tsuyama S. Immunohistochemical analysis of the acid secretion potency in gastric parietal cells. CellBio. 2013;2:179-85. (Block)

Corporate Offices: 160 Oxmoor Blvd • Birmingham, AL 35209 • USA **Mailing Address:** P.O. Box 26221 • Birmingham, AL 35260 • USA
Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • **Fax:** 205.945.8768
Email: info@southernbiotech.com • **Website:** www.southernbiotech.com