SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for S000-02

Streptavidin Fluorescein Conjugated

Overview

Description:	Streptavidin Fluorescein Conjugated - S000-02
Item No.:	S000-02
Size:	1 mg
Applications:	Dot Blot, ELISA, FC, IF, IHC, Multiplex

Product Details

Background:	Streptavidin is isolated from bacteria, Streptomyces avidinii, and has an exceptionally high binding affinity for B7 (biotin). Rockland offers streptavidin in unconjugated and conjugated forms for common immunoassays including ELISA, western blotting, immunohistochemistry. Streptavidin is a tetrameric protein capable of binding 4 biotin groups to each molecule of streptavidin. While streptavidin has identical binding properties as avidin, it lacks the glycoprotein portion of the molecule and therefore shows less non-specific binding. Streptavidin is a slightly smaller molecule with a molecular weight of approximately 53.6 kDa. The sequence of avidin only shows 30% homology with streptavidin, and anti-avidin and anti-streptavidin antibodies are not immunologically cross reactive. Rockland conjugates a broad group of secondary antibodies to many of the classic fluorescent markers including fluorescein, rhodamine, Texas Red, CyDyes™ and Phycoerythrin (RPE). All of the conjugates are ideal for various immunofluorescence based assays including fluorescent western blotting, immunofluorescence microscopy, FLISA, and more. Rockland also produces many next generation fluorochrome dyes designed for detection of primary antibodies in multiplex, multi-color analysis.
Synonyms:	SA, S avidin, streptococcus avidin, streptavidin FITC
Conjugate:	Fluorescein (FITC)
F/P Ratio:	2.2

Target Details

Purity/Specificity:	This product was prepared from chromatographically pure Streptavidin. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Fluorescein and anti-Streptavidin.

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	ELISA, FC, IF, IHC, Multiplex (Based on references)
Application Note:	Streptavidin Fluorescein Conjugated has been tested by dot blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	1:500 - 1:2,500
FLISA:	1:10,000 - 1:50,000
IF:	1:1,000 - 1:5,000

Formulation

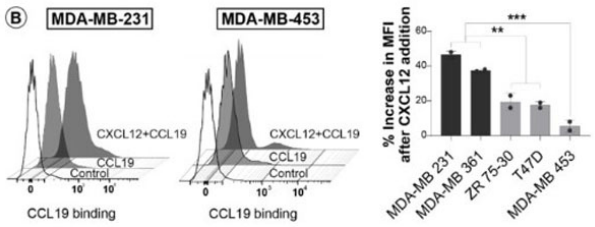
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

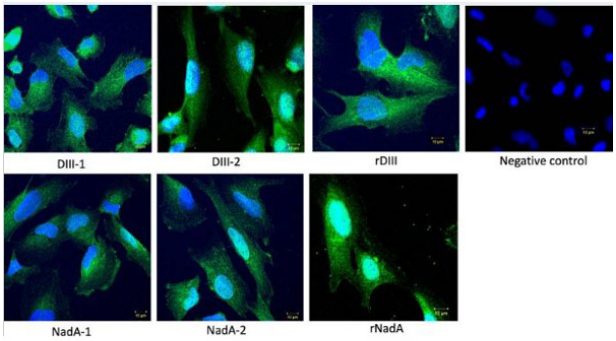
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

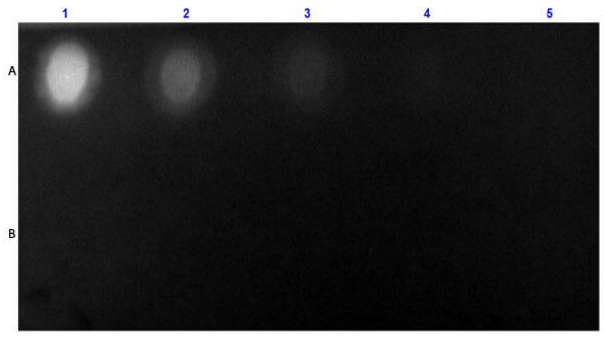
Bottle
Streptavidin Fluorescein Conjugated



Flow Cytometry
CXCL12 and CCL19 cooperate in cell surface binding and signalling responses selectively in invasive breast cancer cells. (B) Cells were left untreated as (negative control) or were exposed to biotinylated CCL19 alone or in combination with CXCL12 as indicated followed by the addition of FITC-conjugated streptavidin and flow cytometry (FC) analysis. Shown are representative histograms for invasive (MDA-MB-231) and non-invasive (MDA-MB-453) cells (left panel). The increase in FITC MFI in cells treated with the combination of CCL19 and CXCL12 relative to cells treated with CCL19 alone was quantitated for a panel of cell lines and graphed (right panel). FITC-conjugated streptavidin (p/n S000-01). All data shown are mean ± SEM with two-tailed student t-test and are representative of at least two independent experiments. Levels of significance ** $p \leq 0.01$, *** $p \leq 0.001$, ns—not significant. Figure 1. PMID: 34685420.



Immunofluorescence Microscopy
Confirmation of putative receptor-binding sites on the ligands using synthetic analogues by immunocytochemistry. Interaction of synthetic analogues of putative receptor-binding sites with cultured hBMECs. The interaction was detected with streptavidin-FITC conjugate (p/n S000-01). Nuclei are stained with DAPI. rDIII and rNadA (positive control) – whole recombinant ligands were incubated with hBMECs. DIII-1 – GTTYGVCSK-biotin; DIII-2 – VLIELEPPFGDSYIVVGRK-biotin; NadA-1 – AATVAIVAAYNNGQEINGFKAGETIYDIGEDGTITQK-biotin; NadA-2 – LADTDAALADTDAALDETTNALNKLGENITTFAEETK-biotin. Negative control – synthetic peptides were excluded from the assay. Figure 8. PMID: 31980725.



Dot Blot
Dot Blot of STREPTAVIDIN Fluorescein Conjugated. Lane A: BSA-Biotin. Lane B: BSA. Lanes 1: load 100ng, 2-5: serial dilution 3 fold. Primary Antibody: n/a Secondary Antibody: Streptavidin Fluorescein Conjugated at 1 mg/mL at RT for 30 minutes. Block: MB-070 at RT for 30 minutes.

References

- Hu CW et al. Development of a TNF-α-mediated Trojan Horse for bacteria-based cancer therapy. *Mol Ther.* (2022)
- Poltavets, V et al. CXCR4-CCR7 Heterodimerization Is a Driver of Breast Cancer Progression. *Life (Basel, Switzerland)* (2021)
- Mertinková P, et. al. A simple and rapid pipeline for identification of receptor-binding sites on the surface proteins of pathogens. *Sci Rep.* (2020)
- Huang MS, Lin WC, Chang JH, Cheng CH, Wang HY, Mou KY. The cysteine-free single mutant C32S of APEX2 is a highly expressed and active fusion tag for proximity labeling applications. *Protein Sci.* (2019)
- Vitacolonna M et al. In-vivo quantification of the revascularization of a human acellular dermis seeded with EPCs and MSCs in co-culture with fibroblasts and pericytes in the dorsal chamber model in pre-irradiated tissue. *Cell Tissue Bank.* (2017)
- Shen, Z et al. Helicobacter cinaedi induced typhlocolitis in Rag-2-deficient mice. *Helicobacter* (2015)
- Patterson, KG et al. Control of established colon cancer xenografts using a novel humanized single chain antibody-streptococcal superantigen fusion protein targeting the 5T4 oncofetal antigen. *PloS One* (2014)
- Möllmann, H. et al. Stem cell-mediated natural tissue engineering. *Journal of Cellular and Molecular Medicine* (2011)

Disclaimer