

Datasheet for A003-02

Avidin Fluorescein Conjugated

Overview

Description:	Avidin Fluorescein Conjugated - A003-02
Item No.:	A003-02
Size:	2 mg
Applications:	Dot Blot, Biochemical Assay, IP

Product Details

Background:	Avidin Fluorescein Conjugated is suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.
Synonyms:	Avidin Fluorescein Conjugated, Avidin FITC Conjugated
Conjugate:	Fluorescein (FITC)
F/P Ratio:	4.02
Specific Activity:	3.55

Target Details

Purity/Specificity:	Avidin Fluorescein Conjugated was prepared from chromatographical pure avidin isolated from egg white followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Fluorescein and anti-Avidin. No reaction was observed against anti-Streptavidin.
Relevant Links:	UniProtKB - P02701

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	Biochemical Assay, IP (Based on references)
Application Note:	Avidin Fluorescein Conjugated has been tested by dot blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting.

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
WB:	User Optimized

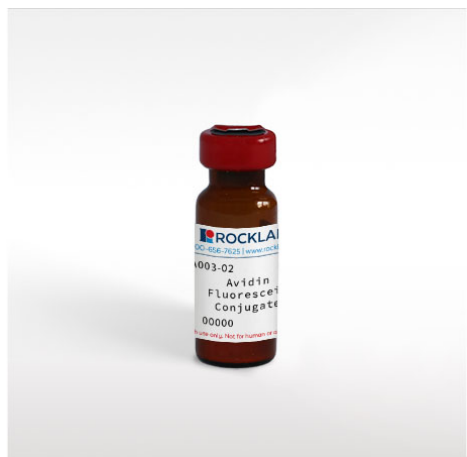
Formulation

Physical State:	Lyophilized
Concentration:	1.1 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

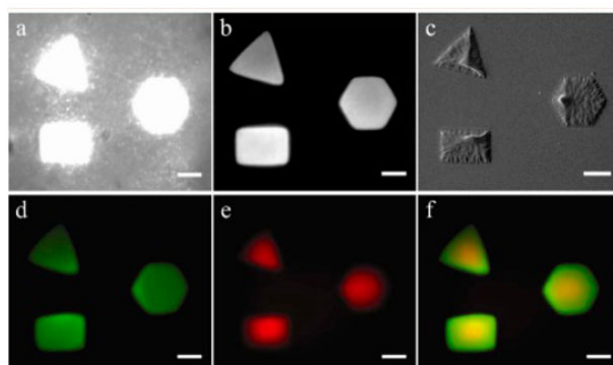
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 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



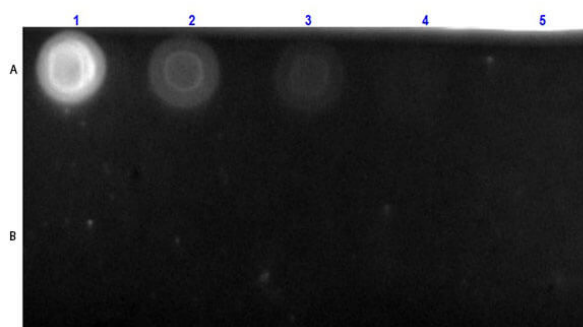
Bottle

Avidin Fluorescein Conjugated



Immunofluorescence Microscopy

BSA-FITC solution exposed to three time-averaged patterns simultaneously at 110 mW for 10 s. (a) Real-time microscope image captured during fabrication. (b) Fluorescent image of patterned protein after sample wash with 1x PBS. (c) SEM image of sample after a chemical desiccation process. Predicted feature dimensions were assessed using area measurements from both the fluorescent and SEM images. The fluorescent measurements indicated the features were ~6% larger than desired, while the SEM measurements indicated they were ~6% smaller than desired; demonstrating an accurate tolerance for pattern transfer. Next, a BSA-FITC solution spiked with avidin conjugated FITC was patterned. Biotin conjugated with ATTO 655 was applied to the resulting BSA/avidin structures for 20 min to assess the retention of avidin binding ability. Fluorescent microscope images were taken using (d) FITC and (e) Cy5 filter sets. A combined fluorescent image (f) reveals the functionality of the substrate after patterning. All scale bars are 50 μm . Fig. 4. PMID: 20589036.

**Dot Blot**

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

References

- Jenness NJ et al. A versatile diffractive maskless lithography for single-shot and serial microfabrication. *Opt Express*. (2010)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.