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Datasheet for A003-12

Avidin Cy3.5 Conjugated

Overview

Description:	Avidin CY3.5 Conjugated - A003-12
Item No.:	A003-12
Size:	1 mg
Applications:	FISH, IF, Multiplex

Product Details

Background:	Avidin Cy3.5 Conjugated is suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.
Synonyms:	Avidin Cy3.5 Conjugated
Conjugate:	Cy3.5™
F/P Ratio:	1.6

Target Details

Purity/Specificity:	Avidin Cy3.5 Conjugated was prepared from chromatographically purified 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-Avidin.

Application Details

Suggested Applications:	FISH, IF, Multiplex (Based on references)
Application Note:	Avidin Cy3.5 Conjugated 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

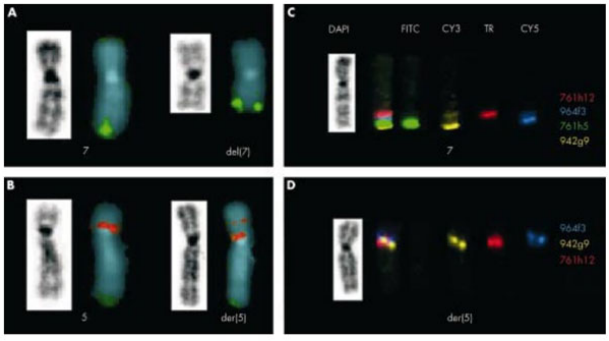
Formulation

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)

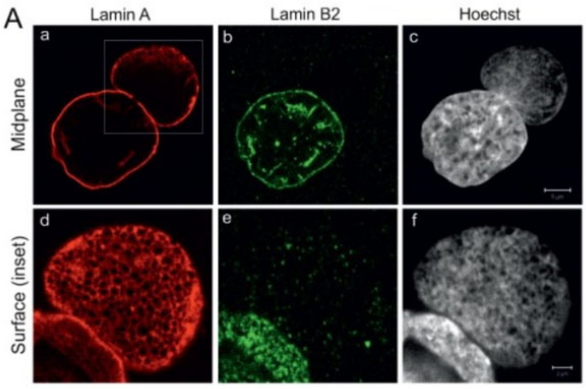
Shipping & Handling

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



Fluorescence in situ Hybridization (FISH)
(A) Hybridization of the 7q subtelomere probe 3K23 showing signals on the distal q arms of the normal chromosome 7 and the der(7). (B) The 5p13 YAC clone 882a10 spans the breakpoint on the der(5) chromosome. (C) Hybridization with a panel of four differently labelled YAC probes specific for chromosome bands 7q31 (761h12 in red), 7q34 (964f3 in blue), 7q35 (761h5 in green), and 7q36 (942g9 in yellow), showing the expected order of hybridization signals on the normal chromosome 7. (D) The inserted chromosome 7 material showed a different hybridization pattern. The signal for the 7q35 band specific YAC is missing. The order of the three remaining YAC clones is 761h12 (7q31)→942g9 (7q36)→964f3 (7q34) from centromere to telomere of the derivative chromosome 5. Figure 2. PMID: 12746414.



Immunofluorescence Microscopy
p.S143F mutation in LA induces stable blebs. (A) Primary fibroblasts (p15) from a patient carrying the 428 C > T (p.S143F) mutation in the LMNA gene showed nuclear blebs with enlarged LA/C meshwork and little or no LB2. The cells were stained with antibodies for LA/C and LB2. Hoechst was used to visualize DNA. Single confocal sections from mid-plane (first row) and bleb surface (boxed area, second row) are shown. Note the fine chromatin strands that co-align with the LA/C meshwork in nuclear blebs while DNA staining is generally reduced compared to the main nuclear body. Scale bar 5 µm.
Progeria cells were grown on PEN membrane slides and analyzed by immunofluorescence with anti-LA/C and anti-LB2 to identify nuclei containing LB2-deficient nuclear blebs. Pools of 20–30 blebs were collected from the samples by laser microdissection and prepared for CGH as described. Whole nuclei on the same membrane were dissected and served as controls for the CGH experiments. The amplified DNA from isolated nuclear blebs was labeled with digoxigenin-11-dUTP and the amplified DNA from whole nuclei was labeled with biotin 16-dUTP. The labeled DNA was mixed with an excess of human Cot-1 DNA and 5 ul of salmon testis DNA. This preparation was hybridized onto normal 46XY metaphase spreads. The biotinylated and digoxigenin-labeled DNA probes were detected with avidin-Cy3.5 (p/n A003–12) and mouse anti-digoxigenin-FITC.
Fig 1. PMID: 25738644.



Bottle
Avidin CY3.5 Conjugated

References

- Pfleghaar KB et al. Gene-rich chromosomal regions are preferentially localized in the lamin B deficient nuclear blebs of atypical progeria cells. *Nucleus.* (2015)
- Kraus J et al. Multicolour FISH fine mapping unravels an insertion as a complex chromosomal rearrangement involving six breakpoints and a 5.89 Mb large deletion. *J Mes Genet.* (2003)

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.