

Datasheet for 001-0033**Bovine Albumin Rhodamine****Overview**

Description:	Bovine Albumin (BSA) Rhodamine Conjugated - 001-0033
Item No.:	001-0033
Size:	1 mg
Applications:	Dot Blot, Cellular Assay, IF
Origin:	Bovine

Product Details

Background:	Bovine Serum Albumin (BSA) is used for various biochemical applications including ELISA (Enzyme-Linked Immunosorbent Assay), high content screening assays, western blotting, FACS Buffer and immunohistochemistry. BSA as a blocking reagent is particularly useful with casein-sensitive antibodies, such as phospho-specific antibodies. Also used as a nutrient in cell and microbial culture. In restriction digests, BSA is used to stabilize some enzymes during digestion of DNA and to prevent adhesion of the enzyme to reaction tubes and other vessels. Bovine Serum Albumin can also be used to determine the quantity of other proteins, by comparing an unknown quantity of protein to known amounts of BSA.
Synonyms:	Bovine Albumin Rhodamine conjugated, Bovine Albumin TRITC conjugated, BSA Rhodamine conjugated, BSA TRITC conjugated
Species of Origin:	Bovine
Conjugate:	Rhodamine (TRITC)
Format:	Albumin
Type:	Native Protein
F/P Ratio:	1.2
Specific Activity:	1.2

Target Details

Purity/Specificity:	This product was prepared from normal serum by delipidation, salt fractionation, ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Bovine Albumin and anti-Bovine Serum.
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Application Details

Tested Applications:	Dot Blot
Suggested Applications:	Cellular Assay, IF (Based on references)
Application Note:	BOVINE ALBUMIN (BSA) Rhodamine conjugated has been tested by dot blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA), fluorescent western blotting, multiplex analysis, including multicolor imaging, and utilizing various commercial platforms.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

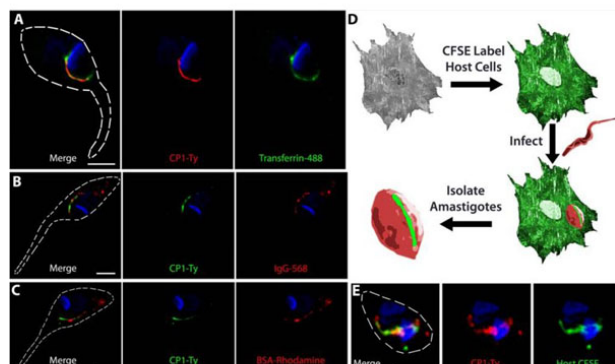
Formulation

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 Polyethylene Glycol (PEG-8000)
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

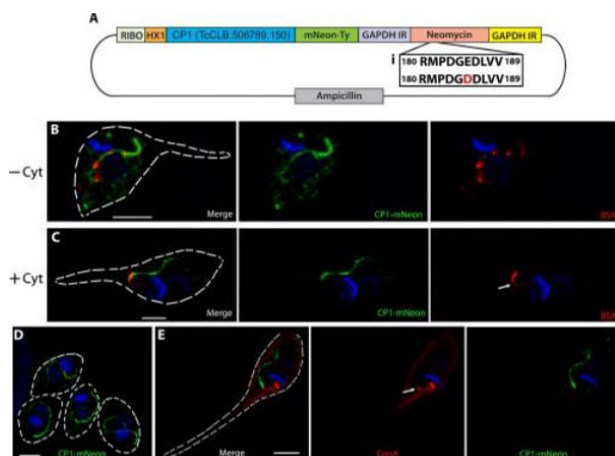
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for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



Immunofluorescence Microscopy

CP1 labels the protein endocytic pathway of the cytosome/cytopharynx complex. SR-SIM IFAs of epimastigotes after endocytosis of Transferrin (A, green), IgG (B, red), and BSA (C, red), shows labeling of the SPC endocytic structure by CP1-Ty. (D) Strategy for evaluating amastigote endocytosis of host-cell cytosolic protein labeled by CFSE. (E) SR-SIM IFA of an amastigote that has endocytosed CFSE labeled host cytosolic protein, coinciding with the SPC labeled by CP1-Ty. Scale bars: 2 μm. Figure 2. PMID: 32010635.



Immunofluorescence Microscopy

Overexpressed CP1-mNeon-Ty Localizes to the SPC. (A) Vector map of the CP1-pTREX overexpression plasmid with a common detrimental mutation of the neomycin cassette restored (i). This fixed neomycin cassette allows for harsh G418 selection of epimastigotes at up to 2,000 μg/mL. (B) SR-SIM microscopy of a CP1-mNeon epimastigote after the endocytosis of BSA-Rhodamine shows that BSA and CP1-mNeon label the same endocytic pathway. (C) Treating epimastigotes with cytochalasin B during the assay prevented endocytosis via the SPC, causing BSA to strongly label the pre-oral ridge in front of the cytostome (arrow). (D) SR-SIM of amastigotes expressing CP1-mNeon-Ty shows SPC labeling. (E) SR-SIM images of epimastigotes expressing CP1-mNeon-Ty, showing SPC labeling. Labeling at 4°C with Concanavalin A - Rhodamine was used to identify the entrance to the SPC (arrow). Scale bars: 2 μm. Figure 3. PMID: 32010635.

References

- Chasen NM. et al. Identification and Localization of the First Known Proteins of the Trypanosoma cruzi Cytostome Cytopharynx Endocytic Complex *Frontiers in Cellular and Infection Microbiology* (2020)

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.