

Datasheet for 000-001-379**Recombinant Red Fluorescent Protein (RFP) Control****Overview**

Description:	Recombinant Red Fluorescent Protein (RFP) Control - 000-001-379
Item No.:	000-001-379
Size:	100 µg
Applications:	Dot Blot, SDS-PAGE, WB
Origin:	Discosoma sp.
Expressed in:	E. coli

Product Details

Background:	Recombinant RFP (wild type, sequence corresponding to RFP, Discosoma spp.) is intended for use as a control when using polyclonal or monoclonal Anti-RFP in immunological assays, in fluorometry, and in fluorescence activated cell sorting (FACS). Rockland offers multiple purified hosts and conjugates of Anti-RFP that can detect RFP by ELISA and western blot. Biotin conjugated polyclonal anti-RFP used in a sandwich ELISA is well suited to titrate RFP in solution when used in combination with unconjugated Anti-RFP antibody. This product can be used as a control in western blots.
Synonyms:	RFP control protein, DsRed protein, rDsRed control, Discosoma sp. Red Fluorescent Protein, Red fluorescent protein drFP583
Species of Origin:	Discosoma sp.
Expressed in:	E. coli
F/P Ratio:	12.2

Target Details

Gene Name:	DsRed
Purity/Specificity:	Recombinant RFP was synthesized with an amino terminal 6XHIS tag and was expressed in E. coli. A 3 step process was used to purify the protein: a partitioning separation using t-butanol, followed by hydrophobic interaction chromatography (HIC), and lastly IMAC nickel chromatography. Analysis by SDS-PAGE resulted in a pattern consistent with purified RFP and was estimated to be greater than 90% pure.

Relevant Links:	• 000-001-379 SDS • NCBI • UniProtKB - Q9U6Y8
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Application Details

Tested Applications:	Dot Blot, SDS-PAGE, WB
Application Note:	RFP Control is suitable as a control for polyclonal or monoclonal Anti-RFP in immunological assays. The molecular weight of RFP (calculated) is 27 kDa, but in a gel it is expected to run at approximately 28-30 kDa. Recombinant RFP has been tested in SDS-page, dot blot, and western blot.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

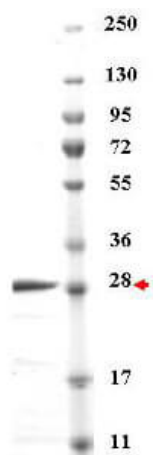
Formulation

Physical State:	Liquid (sterile filtered)
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:	None
Stabilizer:	None

Shipping & Handling

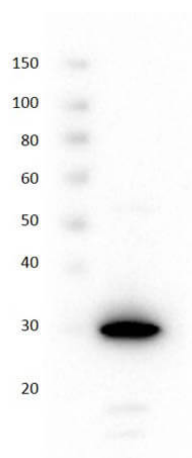
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20 °C prior to opening. Aliquot contents and freeze at -20 °C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE of purified RFP control shows a single band approximately 28-30 kDa (arrow). Approximately 1 µg of purified protein was loaded on to a 4-20% gradient gel for separation followed by staining with Coomassie blue. Molecular weight estimation was made by comparison to MW markers indicated at the right.



Western Blot

Western blot using RFP control protein. Lane 1: Super Signal Molecular Weight. Lane 2: 50ng of RFP (p/n 000-001-379). Primary Antibody: Rabbit Anti-RFP (p/n 600-401-379) at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG HRP (p/n 611-103-122) 1:40,000 for 30mins at RT. Expect ~27kDa.

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.