

Datasheet for ABIN7565910

anti-RFP antibody



Overview

Quantity:	100 μL
Target:	RFP
Reactivity:	Discosoma
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RFP antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP), Immunohistochemistry (IHC), Fluorescence Microscopy (FM)

Product Details

Purpose:	Ready-To-Use RFP Antibody Pre-adsorbed
Immunogen:	Immunogen: The immunogen is a Red Fluorescent Protein (RFP) fusion protein corresponding to the full-length amino acid sequence (234aa) derived from the mushroom anemone Discosoma. Immunogen Type: Recombinant Protein
Cross-Reactivity (Details):	Minimal crossreactivity against Hu Ms & Rt Serum Proteins Expect reactivity against RFP and its variants: mCherry, tdTomato, mBanana, mOrange, mPlum, mOrange and mStrawberry.
Characteristics:	Synonyms: DsRed protein, rDsRed, Discosoma sp. Red Fluorescent Protein, Red fluorescent protein drFP583, sea anemone Discosoma sp. Mushroom, RFP antibody, RFP-RTU, Ready To Use Antibody, RTU Antibody

Product Details

Purification:

RTU Anti-RFP was prepared from monospecific antiserum by immunoaffinity chromatography using Red Fluorescent Protein (Discosoma) coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities.

Preadsorption: Pre-Adsorbed

Sterility:

Sterile filtered

Target Details

Target:

RFP

Alternative Name:

DsRed (RFP Products)

Background:

Background: Fluorescent proteins like green fluorescent protein (GFP) and Discosoma Red Fluorescent Protein (DsRFP) are widely used in research. DsRFP is derived from the mushroom anemone Discosoma sp. Despite sharing only 19 % similarity, anti-GFP antibodies typically don't recognize DsRFP and vice versa. Structurally, DsRFP is akin to GFP in its overall β-can fold and chromophore-formation chemistry. However, GFP undergoes an extra step in chromophore maturation and maintains a tetrameric structure. By using site-directed mutagenesis, various DsRFP variants have been engineered, enabling the red fluorescent protein to mature as a monomer. These monomeric DsRFP variants-mRFP1, mBanana, mCherry, mHoneydew, mPlum, mOrange, mStrawberry, and mTangerine-provide a diverse range of fluorescent colors. Rockland's RFP polyclonal antibodies, raised against the entire wild-type RFP protein, are expected to recognize all these variant forms. These antibodies have been pre-absorbed to prevent potential cross-reactivity with human, mouse, and rat serum proteins, and have also been confirmed to not react with GFP protein. All Rockland Immunochemical's RFP antibodies undergo stringent affinity purification to ensure high specificity and affinity. Thorough quality control tests guarantee that the final product meets or exceeds the highest standards, ensuring optimal performance in your assays.

UniProt:

09U6Y8

Application Details

Application Notes:

Application Note: Ready-To-Use Anti-RFP is designed to detect RFP and its variants. Ready-To-Use Anti-RFP Rabbit Polyclonal Antibody has been optimized and tested in ELISA and in Western blot at a 1:1000 dilution. This Anti-RFP (RTU) Antibody is sufficient for 10 Western blots. Although not tested, there's a high likelihood that this antibody is functional in immunohistochemistry, immunofluorescence, and immunoprecipitation. Researchers can

Application Details

	determine the best concentrations for these applications based on their specific experiments
	Immunohistochemistry Dilution: User Optimized Western Blot Dilution: 1:1,000
	Immunoprecipitation Dilution: User Optimized ELISA Dilution: User Optimized IF Microscopy
	Dilution: User Optimized
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	0.005 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
	Stabilizer: 0.01 % Bovine Serum Albumin (BSA), 25 % (v/v) Glycerol
	Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which
	should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 2-8° C prior to opening. May 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. Dilute only prior to use.
Expiry Date:	12 months