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Datasheet for 600-406-379

RFP Antibody Biotin Conjugated Pre-adsorbed

Overview

Description:	Anti-RFP (RABBIT) Antibody Biotin Conjugated (Min X Hu Ms & Rt Serum Proteins) - 600-406-379
Item No.:	600-406-379
Size:	100 µg
Applications:	ELISA, WB, FC, IF, IHC, Multiplex
Reactivity:	RFP, rRFP
Host Species:	Rabbit

Product Details

Background:	Fluorescent proteins such as Discosoma Red Fluorescent Protein (DsRed) from sea anemone Discosoma sp. mushroom or green fluorescent protein (GFP) from Aequorea victoria jellyfish are widely used in research practice. Fusion RFP and GFP commonly serve as marker for gene expression and protein localization. As DsRed and GFP share only 19% identity, therefore, in general, anti-GFP antibodies do not recognize DsRed protein and vice versa. Structurally, Discosoma red fluorescent protein is similar to Aequorea green fluorescent protein in terms of its overall fold (a β-can) and chromophore-formation chemistry. However, Discosoma red fluorescent protein undergoes an additional step in the chromophore maturation and obligates tetrameric structure. Rockland offers many controls, monoclonal, and polyclonal antibodies for RFP.
Synonyms:	rabbit anti-RFP antibody biotin conjugation, biotin conjugated rabbit anti-RFP antibody, DsRed, rDsRed, Discosoma sp. Red Fluorescent Protein, Red fluorescent protein drFP583
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	10-20

Target Details

Gene Name:	DsRed

Reactivity:	RFP, rRFP
Immunogen Type:	Recombinant Protein
Immunogen:	The immunogen is a Red Fluorescent Protein (RFP) fusion protein corresponding to the full length amino acid sequence (234aa) derived from the mushroom polyp coral Discosoma.
Purity/Specificity:	This product 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. Expect reactivity against RFP and its variants: mCherry, tdTomato, mBanana, mOrange, mPlum, mOrange and mStrawberry. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-biotin, anti-Rabbit Serum, and purified and partially purified Red Fluorescent Protein (Discosoma). No reaction was observed against Human, Mouse or Rat serum proteins. ELISA was used to confirm specificity at less than 0.1% of target signal.
Relevant Links:	• UniProtKB - Q9U6Y8

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	FC, IF, IHC, Multiplex (Based on references)
Application Note:	Polyclonal anti-RFP is designed to detect RFP and its variants. This rabbit anti-RFP Antibody Biotin Conjugated antibody has been tested by ELISA and Western blot. This product can be used to detect RFP by ELISA (sandwich or capture) for the direct binding of antigen. Biotin conjugated polyclonal anti-RFP used in a sandwich ELISA with unconjugated anti-RFP is well suited to titrate RFP in solution. The detection antibody conjugated to biotin is subsequently reacted with streptavidin conjugated HRP (code # S000-03). Optimal titers for applications should be determined by the researcher.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:80,000
IHC:	1:1,000 - 1:5,000
WB:	1:2,000 - 1:10,000

Formulation

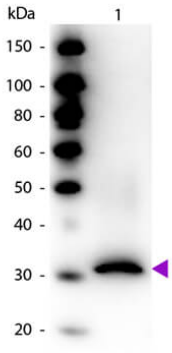
Physical State:	Lyophilized
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
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



Western Blot
Western blot of Biotin conjugated Rabbit Anti-RFP Pre-adsorbed antibody. Lane 1: RFP. Load: 50ng per lane. Primary antibody: Biotin conjugated Rabbit Anti-RFP at 1:1,000 for 60 min at RT. Secondary antibody: Peroxidase streptavidin (p/n S000-03) at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted\Observed size: ~27kDa, ~30kDa for RFP.

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