

**Anti-RFP (RABBIT) Antibody Biotin Conjugated Min X Hu Ms and Rt Serum Proteins**  
**RFP Antibody Biotin Conjugated Pre-adsorbed**  
**Catalog # ASR5862****Specification****Anti-RFP (RABBIT) Antibody Biotin Conjugated Min X Hu Ms and Rt Serum Proteins - Product Information**

Host	Rabbit
Conjugate	Biotin
FP Value	10-20
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
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.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
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 <i>Discosoma</i> .
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Sodium Azide

**Anti-RFP (RABBIT) Antibody Biotin Conjugated Min X Hu Ms and Rt Serum Proteins - Additional Information****Purity**

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.

**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.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

**Anti-RFP (RABBIT) Antibody Biotin Conjugated Min X Hu Ms and Rt Serum Proteins - Protein Information**

**Name** RFP

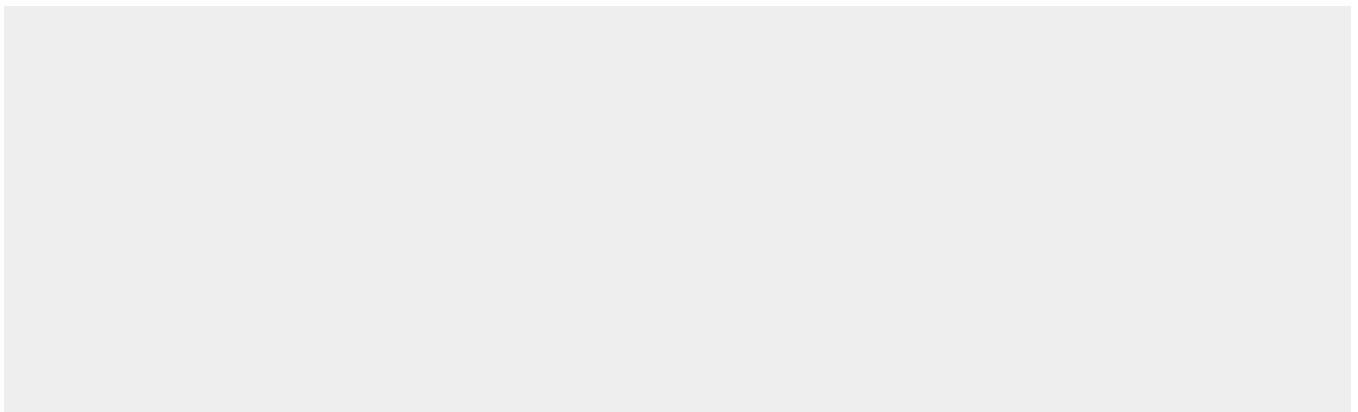
**Function**

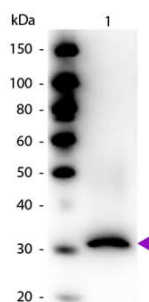
Thought to play a role in photoprotection of the coral's resident symbiont microalgae's photosystems from photoinhibition caused by high light levels found near the surface of coral reefs. In deeper water, the fluorescence may be to convert blue light into longer wavelengths more suitable for use in photosynthesis by the microalgal symbionts.

**Anti-RFP (RABBIT) Antibody Biotin Conjugated Min X Hu Ms and Rt Serum Proteins - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-RFP (RABBIT) Antibody Biotin Conjugated Min X Hu Ms and Rt Serum Proteins - Images**



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.

### **Anti-RFP (RABBIT) Antibody Biotin Conjugated Min X Hu Ms and Rt Serum Proteins - 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  $\beta$ -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.