

**Ready-To-Use Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins**  
**Ready-To-Use RFP Antibody Pre-adsorbed**  
**Catalog # ASR5195****Specification****Ready-To-Use Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Clonality	Polyclonal
Application	WB, IHC, E, IP, I, LCI
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 using 1:1000 dilution. This Anti-RFP (RTU) Antibody is sufficient to run 10 Western blots. Although not tested, this antibody is likely functional in immunohistochemistry, immunofluorescence, and immunoprecipitation. Optimal titers for these applications should be determined by the researcher.
Physical State	Liquid (sterile filtered)
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 anemone <i>Discosoma</i> .
Stabilizer	0.01% Bovine Serum Albumin (BSA), 25% (v/v) Glycerol
Preservative	0.01% (w/v) Sodium Azide

**Ready-To-Use Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins - Additional Information****Purity**

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. 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-Rabbit Serum and purified and partially purified Red Fluorescent Protein (*Discosoma*). No reaction was observed against Human, Mouse or Rat serum proteins.

**Storage Condition**

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.

#### Precautions Note

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

### Ready-To-Use Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins - Protein Information

**Name** RFP

#### Function

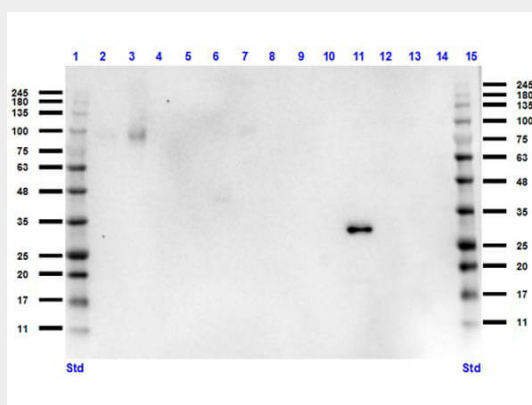
Thought to play a role in photoprotection of the coral's resident symbiont microalgae's photosystems from photoinhibition caused by high light levels found near the surface of coral reefs. In deeper water, the fluorescence may be to convert blue light into longer wavelengths more suitable for use in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

### Ready-To-Use Anti-RFP (RABBIT) Antibody 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](#)

### Ready-To-Use Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins - Images



Western Blot of Ready-to-Use Rabbit Anti-RFP Antibody. Lane 1: Opal Prestain Molecular Weight (p/n MB-210-0500). Lane 2: HeLa (p/n W09-000-364). Lane 3: HEK293 (p/n W09-000-365). Lane 4: Cho/K1 (p/n W07-000-359). Lane 5: MDA-MB-231 (p/n W09-001-GK6). Lane 6: A431 (p/n W09-000-361). Lane 7: Jurkat (p/n W09-001-370). Lane 8: NIH/3T3 (p/n W10-000-358). Lane 9: E. coli HCP (p/n 000-001-J08). Lane 10: FLAG (p/n W00-001-383). Lane 11: RFP (p/n 000-001-379). Lane 12: GFP (p/n 000-001-215). Lane 13: GST (p/n 000-001-200). Lane 14: MBP (p/n 000-001-385). Lane 15: Opal Prestain. Primary Antibody: RTU-RFP at 1  $\mu$ L/mL overnight at 4°C.

Secondary Antibody: Goat anti-Rabbit HRP (p/n 611-103-122) at 1:70,000 for 30min at RT. Expect 27kDa seen in lane 11. Unspecific band in lane 3 caused by cross reactivity with secondary antibody.

### **Ready-To-Use Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins - Background**

Fluorescent proteins such as green fluorescent protein (GFP) or Discosoma Red Fluorescent Protein (or DsRFP) are widely used in research practice. DsRed is isolated from mushroom anemone *Discosoma* sp. GFP and DsRed share only 19% identity, therefore, in general, anti-GFP antibodies do not recognize DsRed protein and vice versa. Structurally, DsRed protein is similar to GFP protein in terms of its overall fold (a  $\beta$ -can) and chromophore-formation chemistry. However, GFP protein undergoes an additional step in the chromophore maturation and obligates tetrameric structure. Using site-directed mutagenesis, several DsRed protein variants have been created allowing the red fluorescent protein mature as a monomeric form. Among DsRFP monomeric variants are monomeric mutant mRFP1, mBanana, mCherry, mHoneydew, mPlum, mOrange, mStrawberry and mTangerine that offer a wide range of fluorescent colors. As Rockland RFP polyclonal antibodies are raised against whole RFP protein of wild type, the polyclonal antibodies are expected to recognize all RFP variant forms. This RFP antibody has been pre-absorbed to eliminate any potential cross-reactivity to human, mouse and rat serum proteins. The antibodies are also confirmed for non-reactivity to GFP protein. All Rockland Immunochemical's RFP antibodies are affinity-purified to assure both high affinity and specificity. Rigorous quality control testing ensures that the finished product meets or exceeds out high standards for optimum performance in your assays.