10320 Camino Santa Fe, Suite G
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Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins

RFP Antibody Pre-adsorbed
Catalog # ASR5194

Specification

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	**Polyclonal anti-RFP is designed to detect RFP and its variants. This antibody has been tested by ELISA, Western blot, IF, and IHC, and is suitable for use in EM, FC, FISH, IP, and multiplex assays based on published references. This antibody can be used to detect RFP by ELISA (sandwich or capture) for the direct binding of antigen. Optimal titers for 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 Discosoma.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-RFP (RABBIT) Antibody 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-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 -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.

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

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

Name RFP

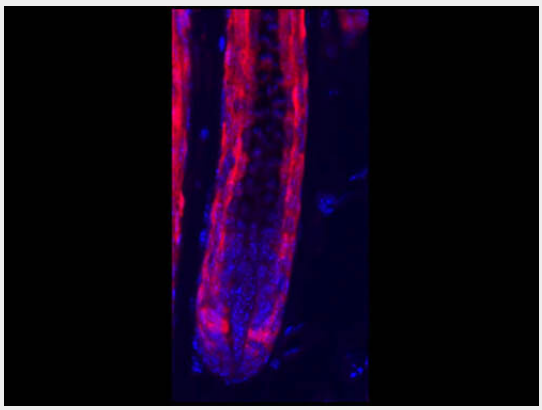
Function
Thought to play a role in photoprotection of the coral's resident symbiont microalgae's photosystems from photoinhibition caused by high light levels found near the surface of coral reefs. In deeper water, the fluorescence may be to convert blue light into longer wavelengths more suitable for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

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 Cytomety
- Cell Culture

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



Immunofluorescence Microscopy of Rabbit Anti-RFP antibody. Tissue: HopERCre/+; R26Tom/+ mice. Fixation: 0.5% PFA. Antigen retrieval: Tamoxifen. Primary antibody: RFP antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: RFP is nuclear and occasionally cytoplasmic. Staining: Hop-derived cells in the hair follicle, labeled in red. Courtesy of Rajan Jain at UPenn.

Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins - Background

Fluorescent proteins such as Discosoma Red Fluorescent Protein (DsRed) from the mushroom anemone Discosoma sp. or green fluorescent protein (GFP) from Aequorea victoria jellyfish are widely used in research practice. Fusion proteins with 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.