

Product datasheet for **TA397421S**

DsRed Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, FC, IF, IHC, WB
Recommended Dilution:	WB: 1:1,000 - 1:5,000 IHC: 1:200-1:2,000 IF: 1:200-1:2,000 FC: 1:200 - 1:2,000 ELISA: 1:20,000 - 1:50,000
Reactivity:	RFP, rRFP, Tomato
Host:	Rabbit
Clonality:	Polyclonal
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> .
Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Red Fluorescent Protein (<i>Discosoma</i>) 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 (<i>Discosoma</i>). No reaction was observed against Human, Mouse or Rat serum proteins.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.05 mg/mL - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.



[View online »](#)

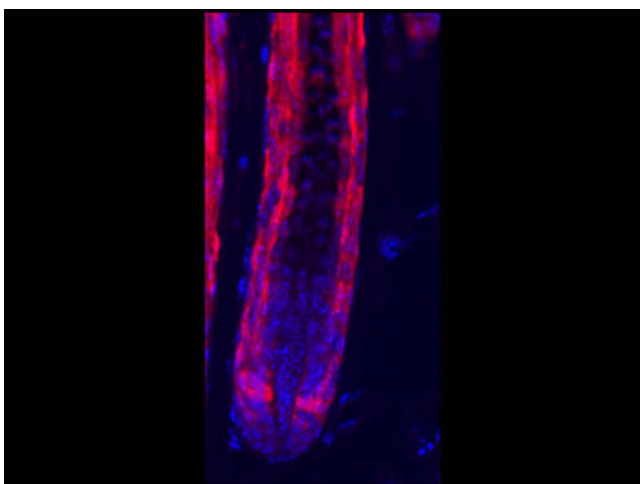
Database Link: [Q9U6Y8](#)

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, DsRed, rDsRed, *Discosoma sp.* Red Fluorescent Protein, Red fluorescent protein drFP583

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 IP, ICC, dual RNA-FISH, iDISCO+, IEM, and FLOW. This antibody 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). Fluorochrome conjugated polyclonal anti-RFP can be used to detect RFP by immunofluorescence microscopy in cell expression systems and can detect RFP containing inserts. Significant amplification of signal is achieved using fluorochrome conjugated polyclonal anti-RFP relative to the fluorescence of RFP alone. For immunoblotting use either alkaline phosphatase or peroxidase conjugated polyclonal anti-RFP to detect RFP or RFP containing proteins on western blots. Optimal titers for applications should be determined by the researcher.

Product images:



Immunofluorescence Microscopy of Rabbit Anti-RFP antibody. Tissue: Hop^{ERCre/+}; R26Tom^{+/+} mice. Fixation: 0.5% PFA. Antigen retrieval: Tamoxifen. Primary antibody: RFP antibody 1:100 for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: Hop-derived cells in the hair follicle, labeled in red.