

Datasheet for ABIN129733
anti-RFP antibody (Biotin)



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Overview

Quantity:	100 µg
Target:	RFP
Reactivity:	Discosoma
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RFP antibody is conjugated to Biotin
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Purpose:	RFP Antibody Biotin Conjugated Pre-adsorbed
Immunogen:	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. Immunogen Type: Recombinant Protein
Isotype:	IgG
Cross-Reactivity (Details):	Minimal crossreactivity against Hu Ms & Rt Serum Proteins Expect reactivity against RFP and its variants: mCherry, tdTomato, mBanana, mOrange, mPlum, mOrange and mStrawberry.
Characteristics:	Synonyms: rabbit anti-RFP antibody biotin conjugation, biotin conjugated rabbit anti-RFP antibody, DsRed, rDsRed, Discosoma sp. Red Fluorescent Protein, Red fluorescent protein drFP583

Product Details

Purification: 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.

Labeling Ratio: 10-20

Target Details

Target: RFP

Alternative Name: DsRed ([RFP Products](#))

Background: 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.

UniProt: [Q9U6Y8](#)

Application Details

Application Notes: Immunohistochemistry Dilution: 1:1,000 - 1:5,000

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.

Western Blot Dilution: 1:2,000 - 1:10,000

ELISA Dilution: 1:10,000 - 1:80,000

Other: User Optimized

Restrictions: For Research Use only

Handling

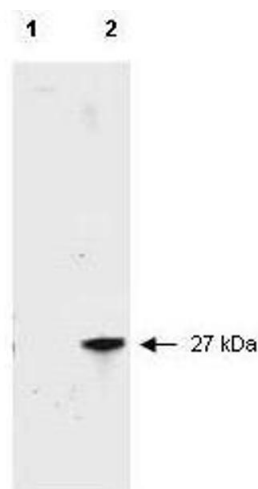
Format:	Lyophilized
Reconstitution:	Reconstitution Volume: 100 µL Reconstitution Buffer: Restore with deionized water (or equivalent)
Concentration:	1.1 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	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.
Expiry Date:	12 months

Publications

Product cited in:	<p>Drost, Houtman, Cseresnyés, Niesner, Rinnenthal, Miller, Prokop, Heppner: "The Amyloid-beta rich CNS environment alters myeloid cell functionality independent of their origin." in: Scientific reports, Vol. 10, Issue 1, pp. 7152, (2020) (PubMed).</p> <p>Herndler-Brandstetter, Ishigame, Shinnakasu, Plajer, Stecher, Zhao, Lietzenmayer, Kroehling, Takumi, Kometani, Inoue, Kluger, Kaech, Kurosaki, Okada, Flavell: "KLRG1+ Effector CD8+ T Cells Lose KLRG1, Differentiate into All Memory T Cell Lineages, and Convey Enhanced Protective Immunity." in: Immunity, Vol. 48, Issue 4, pp. 716-729.e8, (2019) (PubMed).</p> <p>Amano, Densmore, Lanske: "Conditional Deletion of Indian Hedgehog in Limb Mesenchyme Results in Complete Loss of Growth Plate Formation but Allows Mature Osteoblast Differentiation." in: Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research, Vol. 30, Issue 12, pp. 2262-72, (2016) (PubMed).</p> <p>Beyer, Kelly, Miquerol: "Inducible Cx40-Cre expression in the cardiac conduction system and</p>
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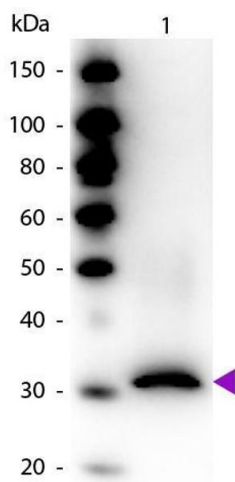
arterial endothelial cells." in: **Genesis (New York, N.Y. : 2000)**, (2010) ([PubMed](#)).

Images



Western Blotting

Image 1. Western blot of RFP recombinant protein detected with polyclonal anti-RFP antibody. Lane 1 shows no reaction against a GFP recombinant protein present in 10 ug of HeLa cell extract. Lane 2 shows a single band detected in 10 ug of a HeLa lysate containing RFP recombinant protein. Separation was achieved using a 4-12% Bis-Tris gradient gel followed by transfer to nitrocellulose and blocking. The membrane was probed with the primary antibody diluted 1:2,500 for 1 h at room temperature followed by washes and reaction with a 1:5,000 dilution of 800 conjugated Goat-a-Rabbit IgG [H&L] MX .800 fluorescence image was captured using the Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.



Western Blotting

Image 2. Western blot of Biotin conjugated Rabbit Anti-RFP Pre-adsorbed antibody. Lane 1: RFP. Lane 2: None. Load: 50 ng per lane. Primary antibody: RFP antibody at 1:1,000 for 60 min at RT. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: ABIN925618 for 30 min at RT. Predicted/Observed size: 30 kDa, 30 kDa for RFP. Other band(s): None.