

Datasheet for 200-101-379S**RFP Antibody****Overview**

Description:	Anti-RFP (GOAT) Antibody - 200-101-379S
Item No.:	200-101-379S
Size:	25 µL
Applications:	WB, EM, FC, IF, IHC
Reactivity:	RFP, rRFP
Host Species:	Goat

Product Details

Background:	Antibodies to RFP (<i>Discosoma</i> spp.) are intended for use in immunological assays including ELISA, western blotting, immunofluorescence, and fluorescence activated cell sorting (FACS).
Synonyms:	goat anti-RFP antibody, DsRed, rDsRed, <i>Discosoma</i> sp. Red Fluorescent Protein, Red fluorescent protein drFP583
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	DsRed
Reactivity:	RFP, rRFP
Immunogen Type:	Recombinant Protein
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> .

Purity/Specificity: Anti-RFP (GOAT) is an IgG fraction purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum and purified and partially purified Red Fluorescent Protein (Discosoma). No reaction was observed against Human, Mouse or Rat serum proteins. Expect reactivity against RFP and its variants: mCherry, tdTomato, mBanana, mOrange, mPlum, mOrange and mStrawberry.

Relevant Links:

- [UniProtKB - Q9U6Y8](#)

Application Details

Tested Applications:	WB
Suggested Applications:	EM, FC, IF, IHC (Based on references)
Application Note:	Polyclonal anti-RFP has been tested by western blot and is designed to detect RFP and its variants. Optimal titers for applications should be determined by the researcher. Expect a band ~27kDa in Western Blot in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
IF:	User Optimized
WB:	1:1000-1:10,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

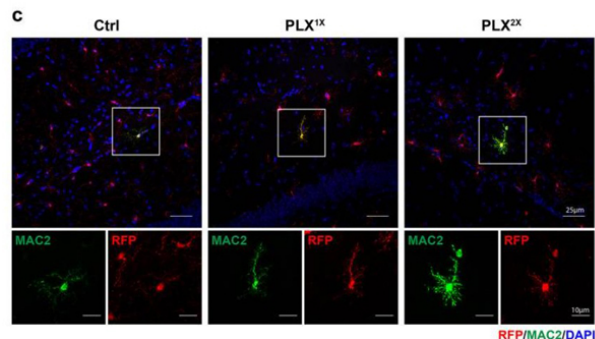
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: 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.

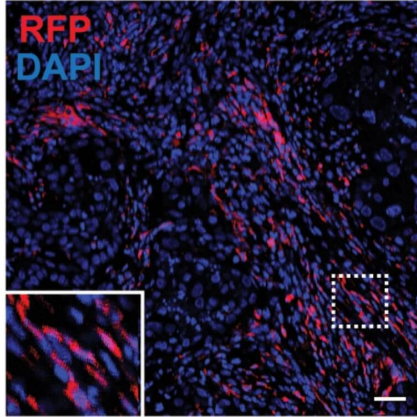
Expiration: Expiration date is one (1) year from date of receipt.

Images



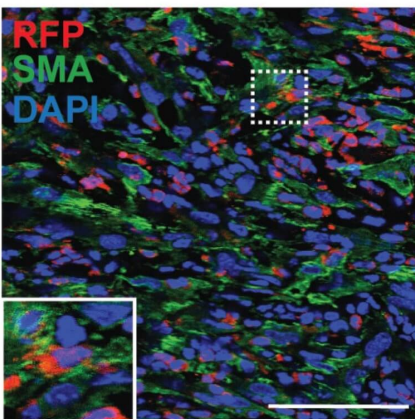
Immunofluorescence Microscopy

(c) Representative confocal images showing colocalization of MAC2 and RFP expression. Boxed area is enlarged and separated by each channel. Images were collected from mouse brain, hippocampal region. Fig 5. PMID: 33054973

A


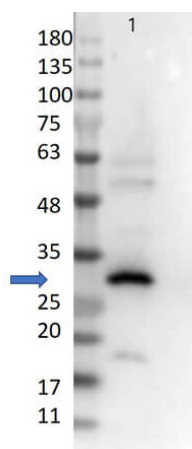
Immunohistochemistry

Population of CD11b + myeloid progenitor cells differentiate into SMA + stromal cells within tumors and in vitro. (A) Representative image of red fluorescent protein (RFP) + stromal cells in tumor from CCR2-RFP heterozygous SCID mouse. (B) RFP + SMA + double positive cells within tumor stroma. (C) CD11b + SMA + double positive cells within tumor stroma. (D) CD45 + CD11b + CD34+ myeloid progenitor cells in the mammary gland at 1.5 (n = 5 empty vector (EV), 7 CCL2) and 2.5 weeks (n = 5 EV, 7 CCL2) post-transplantation were quantified by flow cytometry. (E) CD45 + CD11b + CD34 + myeloid progenitor cells in the bone marrow at 1.5 weeks (n = 6 EV, 7 CCL2) and 2.5 weeks (n = 3 mice/group) post-transplantation were quantified by flow cytometry. (F) Representative brightfield image of colony formed by CD45 + CD11b + CD34 + myeloid progenitor cells isolated using fluorescence-activated cell sorting (FACS). (G) Colonies in culture co-stained with SMA and collagen I. Statistical differences determined by Mann–Whitney U test. Magnification bars = 50 μ m. Figure provided by CiteAb. Source: Cancers (Basel), PMID: 32731354.

B


Immunohistochemistry

Population of CD11b + myeloid progenitor cells differentiate into SMA + stromal cells within tumors and in vitro. (A) Representative image of red fluorescent protein (RFP) + stromal cells in tumor from CCR2-RFP heterozygous SCID mouse. (B) RFP + SMA + double positive cells within tumor stroma. (C) CD11b + SMA + double positive cells within tumor stroma. (D) CD45 + CD11b + CD34+ myeloid progenitor cells in the mammary gland at 1.5 (n = 5 empty vector (EV), 7 CCL2) and 2.5 weeks (n = 5 EV, 7 CCL2) post-transplantation were quantified by flow cytometry. (E) CD45 + CD11b + CD34 + myeloid progenitor cells in the bone marrow at 1.5 weeks (n = 6 EV, 7 CCL2) and 2.5 weeks (n = 3 mice/group) post-transplantation were quantified by flow cytometry. (F) Representative brightfield image of colony formed by CD45 + CD11b + CD34 + myeloid progenitor cells isolated using fluorescence-activated cell sorting (FACS). (G) Colonies in culture co-stained with SMA and collagen I. Statistical differences determined by Mann–Whitney U test. Magnification bars = 50 μ m. Figure provided by CiteAb. Source: Cancers (Basel), PMID: 32731354.



Western Blot

Western Blot of Goat Anti-RFP Antibody. Lane 1: 50ng of RFP protein (p/n 000-001-379). Primary Antibody: Goat Anti-RFP at 1:10,000 overnight at 2-8°C. Secondary Antibody: Donkey anti-Goat IgG HRP (p/n 605-703-125) at 1:40,000 for 30 min at RT. Blocking buffer: BlockOut® (p/n MB-073). Predicted MW: ~27kDa.

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