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Datasheet for 200-101-379

RFP Antibody

Overview

Description:	Anti-RFP (GOAT) Antibody - 200-101-379
Item No.:	200-101-379
Size:	100 µg
Applications:	WB, EM, FC, IF, IHC, Multiplex
Reactivity:	RFP, rRFP
Host Species:	Goat

Product Details

Background:	Antibodies to RFP (Discosoma 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, Discosoma 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 Discosoma.

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, Multiplex (Based on references)
Application Note:	Polyclonal anti-RFP has been tested by and 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

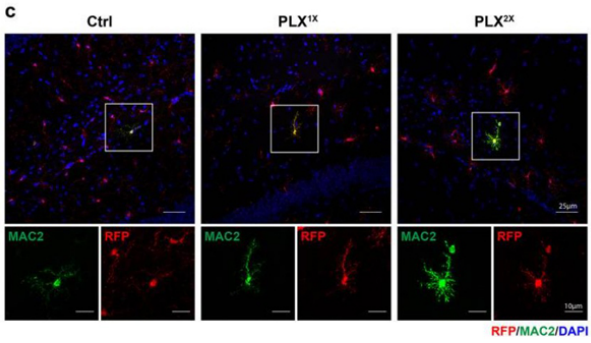
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

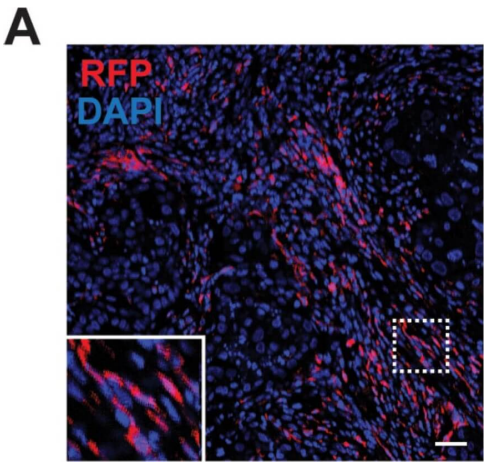
Shipping Condition:	Dry Ice

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

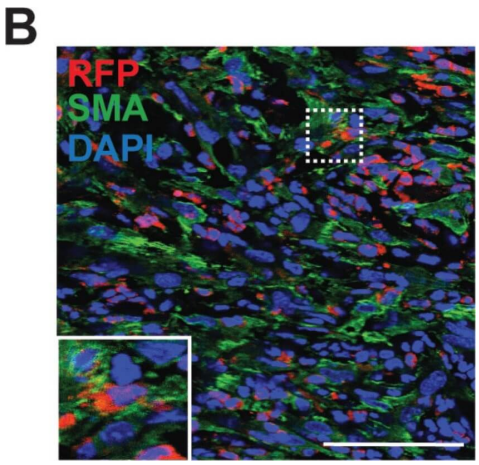
Images



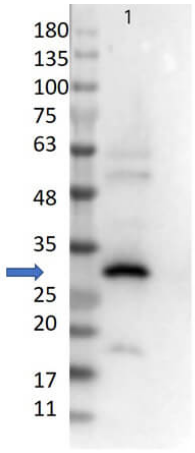
Immunofluorescence Microscopy
(c) Representative confocal images showing colocalization of MAC2 and RFP expression. Boxed area is enlarged and separated by each channel. Images were collected from mouse brain, hippocampal region. Fig 5. PMID: 33054973



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 µm. Figure provided by CiteAb. Source: Cancers (Basel), PMID: 32731354.



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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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