Anti-RFP (MOUSE) Monoclonal Antibody - 200-301-379

Code: 200-301-379 **Size:** 100 µg

Product Description: Anti-RFP (MOUSE) Monoclonal Antibody - 200-301-379

Concentration: 1 mg/ml by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Mouse
Gene Name	DsRed
Species Reactivity	Red Fluorescent Protein (RFP)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store anti-RFP 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.
Synonyms	mouse anti-RFP Antibody, DsRed, rDsRed, Discosoma sp. Red Fluorescent Protein, Red fluorescent protein drFP583
Application Note	Anti-RFP antibodies is designed to detect Red Fluorescent Protein and its variants. This antibody can be used to detect RFP by ELISA (sandwich or capture) for the direct binding of antigen. Biotin conjugated 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 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 anti-RFP relative to the fluorescence of RFP alone. For immunoblotting use either alkaline phosphatase or peroxidase conjugated anti-RFP to detect RFP or RFP containing proteins on western blots. Optimal titers for applications should be determined by the researcher.
Background	Antibodies to RFP (Discosoma spp.) are intended for use in immunological assays including ELISA, western blotting, fluorometry and fluorescence activated cell sorting (FACS). RFP Proteins are useful markers for imagining protein localization, monitoring physiological processes, and detecting transgenic expression. Rockland's anti-RFP antibody can be used to detect native RFP and RFP variants.
Purity And Specificity	Anti-RFP Monoclonal Antibody was purified from concentrated tissue culture supernate by Protein A chromatography. Expect reactivity against RFP and its variants: mCherry, tdTomato, mBanana, mOrange, mPlum, mOrange and mStrawberry.
ELISA	1:75,000 - 1:150,000
Western Blot	1:1,000 - 1:10,000
IF Microscopy	User Optimized
Flow Cytometry	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	Anti-RFP monoclonal antibody is a Red Fluorescent Protein (RFP) fusion protein corresponding to the full length amino acid sequence (234aa) derived from the mushroom polyp coral Discosoma.
General Reference	Gross LA, Baird GS, Hoffman RC, Baldridge KK, Tsien RY: The structure of the chromophore within DsRed, a red fluorescent protein from coral. Proc. Natl. Acad. Sci. USA 2000, 97: 11990-11995.

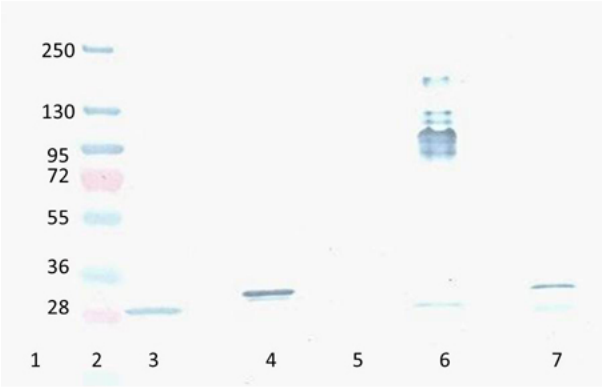
Related Products

000-001-379	Recombinant Red Fluorescent Protein (RFP) Control - 000-001-379
200-301-268	Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268

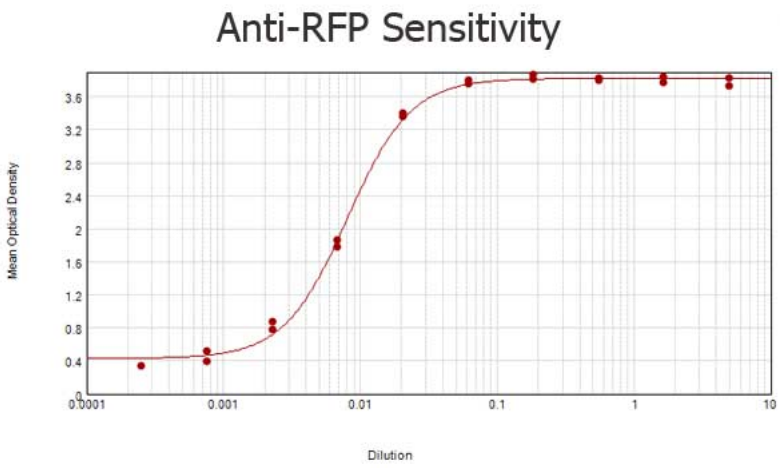
600-401-379	Anti-RFP (RABBIT) Antibody Min X Hu Ms and Rt Serum Proteins - 600-401-379
600-403-379	Anti-RFP (RABBIT) Antibody Peroxidase Conjugated Min X Hu Ms and Rt Serum Proteins - 600-403-379

Images

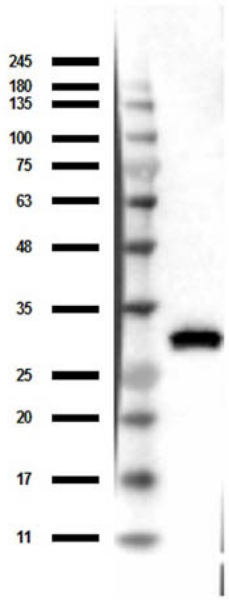
1 Western Blot of Mouse Anti-RFP antibody. Lane 1: YFP protein.Lane 2: Prestained Molecular Weight Marker. Lane 3: Reduced RFP control Protein.Lane 4: Reduced mCherry.Lane 5: GFP protein.Lane 6: Non-Reduced RFP control Protein.Lane 7: Non-Reduced mCherry.Load: 300ng per lane.Primary antibody: RFP antibody at 1:2000 in MB-070 for 3 hours at RT.Secondary antibody: HRP anti-Mouse secondary antibody at 1:10,000 in MB-070 for 60 min at RT. Substrate: TMBM-100 for 20 min.Predicted/Observed size: ~27 kDa.



2 ELISA results of purified Mouse anti-RFP Monoclonal Antibody tested against RFP (p/n 000-001-379). Each well was coated in duplicate with 1.0 µg of the antigen. The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% fish gel, anti-Mouse IgG Antibody Peroxidase Conjugated Aecondary and TMB ELISA Peroxidase Substrate (p/n TMBE-1000).



3 Western Blot of Mouse Anti-RFP Antibody. Lane 1: Opal Prestain Molecular weight (p/n MB-210-0500). Lane 2: 50ng of RFP. Primary Antibody: Mouse Anti-RFP at 1µg/mL overnight at 2-8°C. Secondary Antibody: Rabbit Anti-Mouse HRP (p/n 610-403-C46) at 1:40,000 for 30mins at RT. Block: BlockOut Universal blocking buffer (p/n MB-073). Expect ~27kDa.



Disclaimer

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