Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-402-215

GFP Antibody Fluorescein Conjugated

Overview

Description:	Anti-GFP (RABBIT) Antibody Fluorescein Conjugated - 600-402-215
Item No.:	600-402-215
Size:	100 µg
Applications:	Dot Blot, WB, FC, IF, IHC, Multiplex
Reactivity:	GFP, eGFP, rGFP
Host Species:	Rabbit

Product Details

Background:	Green fluorescent protein is a 27 kDa protein produced from the jellyfish Aequorea victoria, which emits green light (emission peak at a wavelength of 509nm) when excited by blue light. GFP is an important tool in cell biology research. GFP is widely used enabling researchers to visualize and localize GFP-tagged proteins within living cells without the need for chemical staining.
Synonyms:	rabbit anti-GFP antibody fluorescein conjugation, FITC conjugated rabbit anti-GFP antibody, Green Fluorescent Protein, GFP antibody, Green Fluorescent Protein antibody, EGFP, enhanced Green Fluorescent Protein, Aequorea victoria, Jellyfish
Host Species:	Rabbit
Conjugate:	Fluorescein (FITC)
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	1.11
Specific Activity:	2.24

Target Details

Reactivity:	GFP, eGFP, rGFP
Immunogen Type:	Recombinant Protein

Immunogen:	Anti-Green Fluorescent Protein (GFP) is produced by immunizing GFP containing fusion protein that corresponds to the full length amino acid sequence (246aa) derived from the jellyfish Aequorea victoria.
Purity/Specificity:	GFP Antibody Fluorescein Conjugated was prepared from monospecific antiserum by immunoaffinity chromatography using Green Fluorescent Protein (Aequorea victoria) coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum, anti-Fluorescein and purified and partially purified Green Fluorescent Protein (Aequorea victoria) Serum. No reaction was observed against Human, Mouse and Rat Serum Proteins.
Relevant Links:	• UniProtKB - P42212

Application Details

Tested Applications:	Dot Blot, WB
Suggested Applications:	FC, IF, IHC, Multiplex (Based on references)
Application Note:	Anti-Green fluorescent protein Fluorescein conjugated Antibody has been tested by dot blot and western blot and is suitable for immunomicroscopy and flow cytometry or FACS analysis as well as other antibody based fluorescent assays requiring lot-to-lot consistency.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:40,000
FC:	1:2000
IF:	1:500 - 1:2,500
WB:	1:10,000-1:25,000

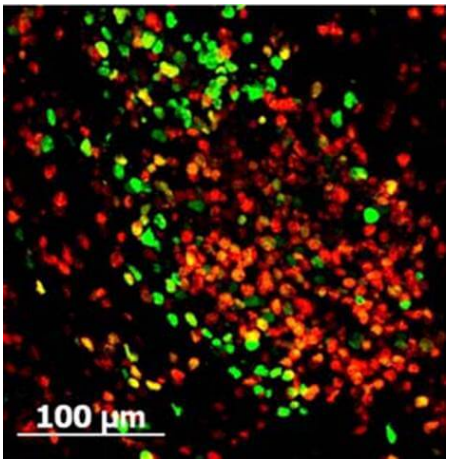
Formulation

Physical State:	Lyophilized
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:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

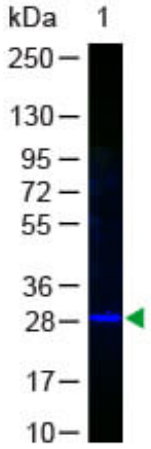
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy
Rockland FITC conjugated Rabbit anti GFP (green) stains mouse spleen cells Tissue: spleen cells infected with MHV68 -H2bYFP . As seen in: Collins CM, Speck SH (2012) Tracking Murine Gammaherpesvirus 68 Infection of Germinal Center B Cells In Vivo. PLoS ONE 7(3): "e33230. doi:10.1371/ journal.pone.0033230“



Western Blot
Western Blot of GFP Antibody Fluorescein Conjugated. Lane 1: GFP. Load: 50 ng per lane. Primary antibody: none. Secondary antibody: Fluorescein Conjugated Anti-GFP at 1:1000 for 60 min at RT. Block: 1% BSA-TTBS for 30 min at RT. Predicted/Observed size: 28 kDa, 28 kDa.

References

- Inclan-Rico JM et al. MrgprA3 neurons drive cutaneous immunity against helminths through selective control of myeloid-derived IL-33. *Nat Immunol.* (2024)
- Tsuchiya M et al. TBK1 inhibitors enhance transfection efficiency by suppressing p62/SQSTM1 phosphorylation. *Genes Cells.* (2023)
- Fox TA et al. Therapeutic gene editing of T cells to correct CTLA-4 insufficiency. *Sci Transl Med.* (2022)
- Lee RD et al. Single-cell analysis identifies dynamic gene expression networks that govern B cell development and transformation. *Nat Commun.* (2021)
- Dolina JS, Lee J, Griswold RQ, et al. TLR9 Sensing of Self-DNA Controls Cell-Mediated Immunity to Listeria Infection via Rapid Conversion of Conventional CD4+ T Cells to Treg. *Cell Rep.* (2020)
- Owen DL et al. Thymic regulatory T cells arise via two distinct developmental programs. *Nat Immunol.* (2019)
- Daniel et al. miR-9a mediates the role of Lethal giant larvae as an epithelial growth inhibitor in Drosophila. *Biology Open* (2018)
- Ogawa C et al. Blimp-1 functions as a molecular switch to prevent inflammatory activity in Foxp3+ RORγt+ regulatory T cells. *Cell Rep.* (2018)
- Bankoti et al. Differential regulation of Effector and Regulatory T cell function by Blimp1. *Scientific Reports* (2017)
- Collins, CM et al. Tracking murine gammaherpesvirus 68 infection of germinal center B cells in vivo. *PloS One* (2012)
- Guo F et al. Macroglial plasticity and the origins of reactive astroglia in experimental autoimmune encephalomyelitis. *J Neurosci.* (2011)
- Athena M Soulika et al. Initiation and progression of axonopathy in experimental autoimmune encephalomyelitis. *J Neurosci.* (2009)
- Sokol CL et al. A mechanism for the initiation of allergen-induced T helper type 2 responses. *Nat Immunol.* (2008)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.