Order online now!

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

Datasheet for 600-102-215

GFP Antibody Fluorescein Conjugated

Overview

Description:	Anti-GFP (GOAT) Antibody Fluorescein Conjugated (Min X Hu Ms & Rt Serum Proteins) - 600-102-215
Item No.:	600-102-215
Size:	1 mg
Applications:	Dot Blot, WB, FC, IF, IHC, Multiplex
Reactivity:	GFP, eGFP, rGFP
Host Species:	Goat

Product Details

Background:	GFP Fluorescein Conjugated Antibody is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.
Synonyms:	goat anti-GFP Antibody fluorescein Conjugation, FITC conjugated goat anti-GFP antibody, Green Fluorescent Protein, GFP antibody, Green Fluorescent Protein antibody, EGFP, enhanced Green Fluorescent Protein, Aequorea victoria, Jellyfish
Host Species:	Goat
Conjugate:	Fluorescein (FITC)
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	3.85

Target Details

Reactivity:	GFP, eGFP, rGFP
Immunogen Type:	Recombinant Protein
Immunogen:	Recombinant Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish Aequorea victoria.

Purity/Specificity:	GFP Fluorescein Conjugated Antibody 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-Goat Serum, anti-Fluorescein and purified and partially purified Green Fluorescent Protein (Aequorea victoria). No reaction was observed against Human, Mouse and Rat Serum Proteins.
Relevant Links:	• 600-102-215 SDS • UniProtKB - P42212

Application Details

Tested Applications:	Dot Blot, WB
Suggested Applications:	FC, IF, IHC, Multiplex (Based on references)
Application Note:	Anti-GFP 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.
FLISA:	>1:20,000
IF:	1:500 - 1:2,500
IHC:	User Optimized
WB:	>1:10,000

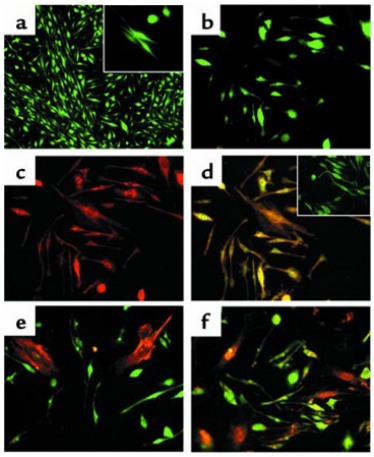
Formulation

Physical State:	Lyophilized
Concentration:	1.0 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:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

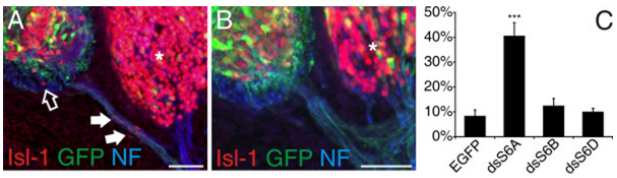
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store anti-GFP 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.

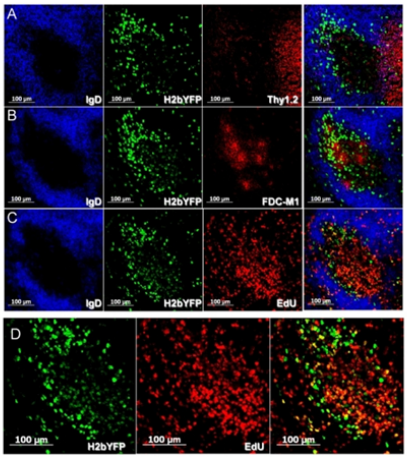
Images



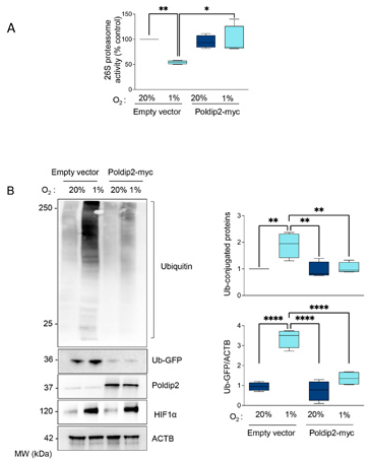
Immunohistochemistry
Characterization of cultured lung fibroblasts. Lung fibroblasts isolated from BLM-treated GFP BM chimera mice were analyzed by fluorescence microscopy (a–f). The cells showed typical fibroblast morphology, many being stellate or spindle-shaped (a). An average 80% of these cells expressed GFP (green fluorescence in a, at ×100; inset at ×400). Cells were stained with both anti-GFP (green) and anti–Col I (red) antibodies in b–d. The same microscopic field was photographed with the green (b) or red (c) filter only, or both simultaneously (d). Colocalization of both GFP and Col I expression resulted in a yellow color in d. Inset in d shows the cells stained with anti-GFP antibody (green) and isotype-matched control IgG for Col I (red). Cells were also stained with both anti-GFP (green) and anti–α-SMA (red) antibodies (e). Colocalization of GFP and α-SMA should appear yellow, but the two α-SMA+ cells in this field did not appear to express GFP (e). Finally, cells were also stained with anti-GFP (green) and anti-TERT (red) antibodies. Colocalization of GFP and TERT appeared yellow, and most of the cells in this field expressed both TERT and GFP (f). Magnification was ×200 for b–f. A representative example of at least three independent experiments is shown. Fig 5. PMID: 14722616



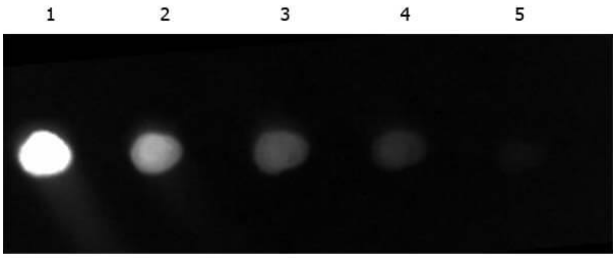
Immunohistochemistry
Downregulation of Sema6A in BCCs results in translocation of motoneurons out of the spinal cord. (a) In the absence of Sema6A from BCCs, motoneurons stream out of the ventral spinal cord and migrate along the ventral roots (arrows). The open arrow points to a motoneuron that is located in the ventral funiculus. (b) In control-treated embryos motoneurons along ventral roots or in the ventral funiculus were rarely seen. Motoneurons were identified by Isl-1 (red). An EGFP plasmid was co-injected with the dsRNA derived from SEMA6A. Axons were stained with an antibody against neurofilament (blue). Note that sensory neurons in the DRG (asterisk in (a, b)) are also stained by Isl-1. (c) Perturbation of Sema6B or Sema6D did not enhance the number of motoneurons in the periphery compared to control-treated embryos injected only with the plasmid encoding EGFP. Three asterisks indicate $P < 0.0001$ for the comparison between dsS6A and all other treatment groups. Values are given as mean ± standard error of mean. Bar: 50 µm. Fig 2. PMID: 18088409



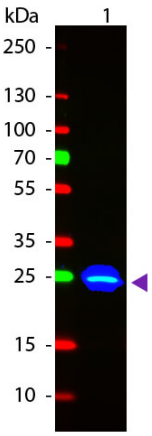
Immunofluorescence Microscopy
Serial sections through a representative splenic GC recovered at day 16 post-infection, co-stained with markers to localize infected cells within specific germinal center compartments. Sections were stained with anti- IgD to delineate the mantle zone surrounding the GC and anti-GFP to detect infected cells. To detect the T cell zone, sections were co-stained with anti-Thy 1.2 (row A). The light zone is detected by the presence of follicular dendritic cells stained with anti-FDC-M1 (row B). Rapidly dividing centroblasts are found in the dark zone, and can be detected by increased incorporation of EdU (row C). Row D shows the h2bYFP and EdU panels from row C overlayed without IgD to identify proliferating H2bYFP positive cells. Fig 5. PMID: 22427999



Western Blot
(A) HASMCs were transduced with empty vector or Poldip2-myc-expressing adenovirus and cultured under normoxia or hypoxia for 48 hours. Lysates were prepared, and UPS activity was measured using a fluorogenic assay described in the Methods section. Total protein lysates were prepared after 24h, and the accumulation of fluorescent probe was quantified by immunoblot using a primary antibody recognizing GFP (p/n 600-102-215). Results were expressed as a percentage of the control. (B) Representative western blot to analyze the accumulation of Poly-ubiquitinated proteins and the reporter Ub-GFP signal. Bar graphs represent mean ± SE from 4 independent experiments. Fig 4. PMID: 36596387



Dot Blot
Dot Blot of Fluorescein conjugated Goat anti-GFP. Antigen: GFP Load: Five point 3-fold serial dilution starting at 100ng (Dot 1). Primary antibody: None. Secondary Antibody: GFP Antibody Fluorescein Conjugated Pre-absorbed (p/n 600-102 -215) at 1:1,000 for 1hr at RT. Blocking: Blocking buffer for Fluorescent Blotting (p/n MB-070) Imaged with FITC filter.



Western Blot
Western Blot of Goat anti-GFP Fluorescein Conjugated Antibody. Lane 1: GFP. Lane 2: None. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: Fluorescein goat secondary antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 28 kDa, 33 kDa for GFP. Other band(s): None.

References

- Cypranowska CA et al. Deficiency in transmitter release triggers homeostatic transcriptional changes that increase presynaptic excitability. *Proc Natl Acad Sci U S A.* (2025)
- Martins LR et al. Single-cell division tracing and transcriptomics reveal cell types and differentiation paths in the regenerating lung. *Nat Commun.* (2024)
- Paredes F et al. Metabolic regulation of the proteasome under hypoxia by Poldip2 controls fibrotic signaling in vascular smooth muscle cells. *Free Radic Biol Med.* (2023)
- Chen, PM et al. CD38 reduces mitochondrial fitness and cytotoxic T cell response against viral infection in lupus patients by suppressing mitophagy. *Science Advances* (2022)
- Zuniga N et al. Cables1 links Slit/Robo and Wnt/Frizzled signaling in commissural axon guidance. *bioRxiv Preprint* (2021)
- Dumoulin A et al. Axon guidance at the spinal cord midline–a live imaging perspective. *J Comp Neurol.* (2021)
- Lehmkuhl EM et al. TDP-43 proteinopathy alters the ribosome association of multiple mRNAs including the glypican Dally-like protein (Dlp)/GPC6. *Acta Neuropathol Commun.* (2021)
- Guo S et al. Identity and lineage fate of proteolipid protein 1 gene (Plp1)-expressing cells in the embryonic murine spinal cord. *Dev Dyn.* (2020)
- Cornelius RJ et al. A novel distal convoluted tubule-specific Cre-recombinase driven by the NaCl cotransporter gene. *Am J Physiol Renal Physiol.* (2020)
- Perna et al. TF-ChIP Method for Tissue-Specific Gene Targets. *Frontiers in Cellular Neuroscience* (2019)
- Hock et al. Hypertonic Stress Causes Cytoplasmic Translocation of Neuronal, but Not Astrocytic, FUS due to Impaired Transportin Function. *Cell Reports* (2018)
- Bannerman P et al. Brain Nat8l knockdown suppresses spongiform leukodystrophy in an aspartoacylase-deficient Canavan disease mouse model. *Mol Ther.* (2018)
- Kwon JS et al. Controlling depth of cellular quiescence by an Rb-E2F network switch. *Cell Rep.* (2017)
- Fong et al. 53BP1 and USP28 mediate p53-dependent cell cycle arrest in response to centrosome loss and prolonged mitosis. *Elife* (2016)
- Mahmud SA et al. Tumor necrosis factor receptor superfamily costimulation couples T cell receptor signal strength to thymic regulatory T cell differentiation. *Nat Immunol.* (2014)
- Wang WJ et al. CEP162 is an axoneme-recognition protein promoting ciliary transition zone assembly at the cilia base. *Nat Cell Biol.* (2013)
- Doucet YS et al. The touch dome defines an epidermal niche specialized for mechanosensory signaling. *Cell Rep.* (2013)
- 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)

- Alberi L et al. Supplemental Information Activity-Induced Notch Signaling in Neurons Requires Arc/Arg3. 1 and Is Essential for Synaptic Plasticity in Hippocampal Networks. *Neuron.* (2011)
- Niederkofler V et al. Nectin-like molecules/SynCAMs are required for post-crossing commissural axon guidance. *Development.* (2010)
- Athena M Soulika et al. Initiation and progression of axonopathy in experimental autoimmune encephalomyelitis. *J Neurosci.* (2009)
- Mauti, O. et al. Semaphorin6A acts as a gate keeper between the central and the peripheral nervous system. *Neural Development* (2007)
- Hashimoto et al. Bone marrow–derived progenitor cells in pulmonary fibrosis. *Journal of Clinical Investigation* (2004)

Disclaimer