Anti-GFP (RABBIT) Antibody - 600-401-215

Code: 600-401-215 **Size:** 100 µg

Product Description: Anti-GFP (RABBIT) Antibody - 600-401-215

Concentration: 0.99 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Species Reactivity	wt and all variants such as rGFP, eGFP, S65T-GFP, RS-GFP, YFP and EGFP
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-GFP Antibody 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. GFP antibody is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	rabbit anti-GFP antibody, Green Fluorescent Protein, GFP antibody, Green Fluorescent Protein antibody, EGFP, enhanced Green Fluorescent Protein, Aequorea victoria, Jellyfish
Application Note	Anti-GFP antibody is designed to detect GFP and its variants. GFP antibody can be used to detect GFP by ELISA (sandwich or capture) for the direct binding of antigen and recognizes wild type, recombinant and enhanced forms of GFP. Biotin conjugated polyclonal anti-GFP used in a sandwich ELISA is well suited to titrate GFP in solution using this antibody in combination with Rockland's monoclonal anti-GFP (600-301-215) using either form of the antibody as the capture or detection antibodies. However, use the monoclonal form only for the detection of wild type or recombinant GFP as this form does not sufficiently detect 'enhanced' GFP. The detection antibody is typically conjugated to biotin and subsequently reacted with streptavidin conjugated HRP (code # S000-03). Fluorochrome conjugated polyclonal anti-GFP can be used to detect GFP by immunofluorescence microscopy in prokaryotic (E.coli) and eukaryotic (CHO cells) expression systems and can detect GFP containing inserts. Significant amplification of signal is achieved using fluorochrome conjugated polyclonal anti-GFP relative to the fluorescence of GFP alone. For immunoblotting use either alkaline phosphatase or peroxidase conjugated polyclonal anti-GFP to detect GFP or GFP containing proteins on western blots.Optimal titers for applications should be determined by the researcher.
Background	Green Fluorescent Protein (GFP) 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. GFP Antibody is ideal for Cell Biology, Neuroscience and Cancer research.
Purity And Specificity	Anti-GFP 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-Rabbit Serum and purified and partially purified Green Fluorescent Protein (Aequorea victoria). No reaction was observed against Human, Mouse or Rat serum proteins.
Assay Dilutions	User Optimized
ELISA	1:20,000 - 1:120,000
Western Blot	1:500 - 1:5,000
Immunohistochemistry	1:200 - 1:3,000
IF Microscopy	1:500 - 1:5,000
Flow Cytometry	User Optimized
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	The immunogen is a Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish Aequorea victoria.

General Reference

Rizzolio F, Lucchetti C, Caligiuri I, Marchesi I, Caputo M, Klein-Szanto AJ, Bagella L, Castronovo M, Giordano A. (2012) Retinoblastoma tumor-suppressor protein phosphorylation and inactivation depend on direct interaction with Pin1. Cell Death and Differentiation 1-10. Nature

Specific Reference

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Torres J, Funk HM, Zegers MMP, ter Beest MBA. The syntaxin 4 N terminus regulates its basolateral targeting by munc18c-dependent and -independent mechanisms. J. Biol. Chem. 2011 Mar 25;286(12):10834–10846.

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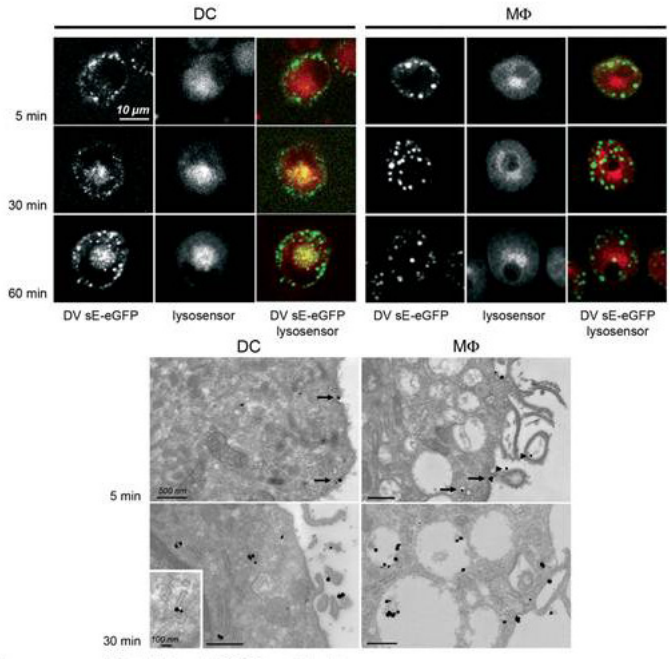
Related Products

000-001-215	Recombinant Green Fluorescent Protein (GFP) Control Protein - 000-001-215
200-341-215	Anti-GFP (MOUSE) Monoclonal Antibody DyLight™ 488 Conjugated - 200-341-215
200-345-215	Anti-GFP (MOUSE) Monoclonal Antibody DyLight™ 800 Conjugated - 200-345-215
600-141-215	Anti-GFP (GOAT) Antibody DyLight™ 488 Conjugated Min X Hu Ms and Rt Serum Proteins - 600-141-215

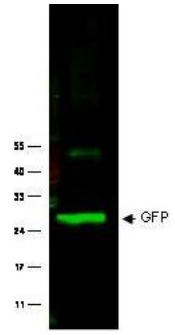
Images

1	Immuno-microscopy of Rabbit anti-GFP antibody. Monocyte derived dendritic cells and dermal macrophages were challenged and directly visualized with eGFP labeled Dengue virus to localize sequestration of virus particles in the different cells (upper). The location of the GFP was confirmed by TEM (lower magnified view) using Rockland rabbit anti GFP Primary antibody (1:200) and a gold labeled secondary antibody.As referenced in:Kwan W-H, Navarro-Sanchez E, Dumortier H, Decossas M, Vachon H, et al. (2008) Dermal-Type Macrophages Expressing CD209/DC-SIGN Show Inherent Resistance to Dengue Virus Growth. PLoS Negl Trop Dis 2(10): e311. doi:10.1371/journal.pntd.0000311



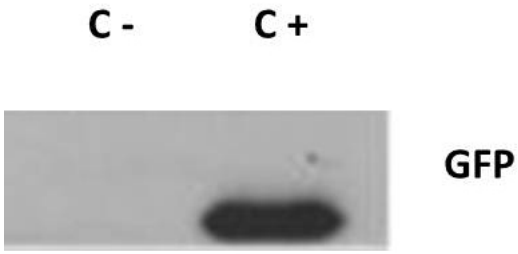
2

Western Blot of Rabbit anti-GFP antibody. Lane 1: Wild type GFP (0.1 µg) was used to spike HeLa whole cell lysate. Lane 2: none. Load: 30 µg per lane.Primary antibody: GFP antibody at 1:1000 for overnight at 4°C.Secondary antibody: IRDye800™ Goat-a-Rabbit IgG [H&L] MX10 (611-132-122) at 1:10,000 for 45 min at RT.Block: 5% BLOTTO in PBS overnight at 4°C.Predicted/Observed size: 27 kDa for epitope tag GFP. Other band(s): none.

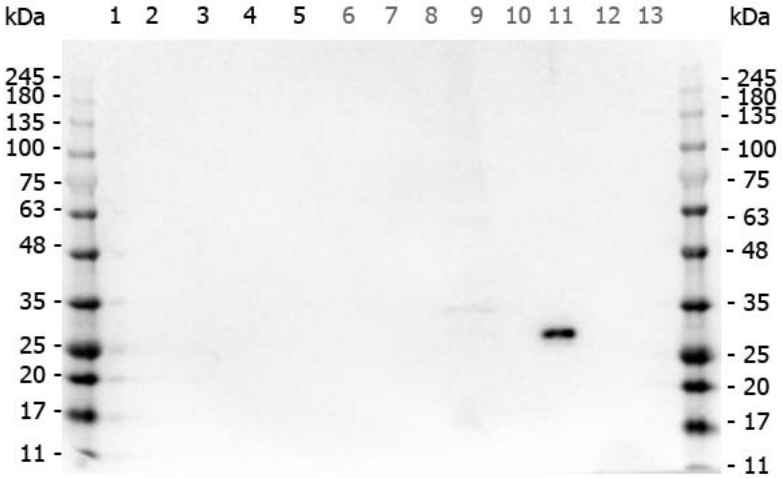


3

Western Blot of Rabbit anti-GFP antibody. Lane 1: 293FT cells transfected with CDK4 dominant negative (C-).Lane 2: 293FT cells poitive control (C+).Load: 25 µg per lane.Primary antibody: GFP antibody at 1:400 for overnight at 4°C.Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT.Block: 5% BLOTTO overnight at 4°C.Predicted/Observed size: 27 kDa for GFP.



4	Western Blot of Rabbit anti-GFP antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-363).Lane 3: CHO/K1 Lysate (p/n W07-000-357).Lane 4: MDA-MB-231 (p/n W09-001-GK6).Lane 5: A431 Lysate (p/n W09-000-361).Lane 6: Jurkat Lysate (p/n W09-001-370).Lane 7: NIH/3T3 Lysate (p/n W10-000-358).Lane 8: E-coli HCP Control (p/n 000-001-J08).Lane 9: FLAG Positive Control Lysate (p/n W00-001-383Lane 10: Red Fluorescent Protein (p/n 000-001-379).Lane 11: Green Fluorescent Protein (p/n 000-001-215).Lane 12: Glutathinoe-S-Transferase ProteinLane 13: Maltose Binding Protein (p/n 000-001-385).Load: 10 µg of lysate or 50ng of purified protein per lane.Primary antibody: GFP antibody at 1ug/mL overnight at 4C.Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:30,000 for 60 min at RT.Blocking Buffer: 1% Casein-TTBS for 30 min at RT.Predicted/Observed size: 30 kDa for GFP.



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