OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

AP09426PU-N Polyclonal Antibody to GFP (Ads. to Hu, Ms, Rt Serum Proteins) - Aff - Purified

Alternate names: GFP-Tag, Green fluorescent protein

Quantity: 0.1 mg

Concentration: 0.64 mg/ml (by UV absorbance at 280 nm)

Background: Green fluorescence protein (GFP) is a 27 kDa protein derived from the jellyfish Aequorea victoria, which emits green light (emission peak at a wavelenth of 509 nm) when excited by blue light (excitation peak at a wavelenth of 395 nm). Green Fluorescent Protein (GFP) has become an invaluable tool in cell biology research, since its intrinsic fluorescence can be visualized in living cells. GFP fluorescence is stable under fixation conditions and suitable for a variety of applications. GFP has been widely used as a reporter for gene expression, enabling researchers to visualize and localize GFP-tagged proteins within living cells without the need for chemical staining. Other applications of GFP include assessment of protein protein interactions through the yeast two hybrid system and measurement of distance between proteins through fluorescence energy transfer (FRET) protocols. GFP technnology has considerably contributed to a greater understanding of cellular physiology.

YFP differs from GFP due to a mutation at T203Y; antibodies raised against full-length GFP should also detect YFP and other variants.

Uniprot ID: P42212

NCBI: 6100

Host / Isotype: Chicken / Ig

Immunogen: Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish *Aequorea victoria*

Format:
State: Liquid purified Ig
Purification: Affinity chromatography
Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide

Applications:
ELISA: 1/11,000 - 1/12,000.
Western Blot: 1/300 - 1/350.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody reacts to Green Fluorescent Protein (GFP).

Storage:

Store the antibody at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Storage Conditions for Trial Size:
This vial contains a relatively low volume of reagent (25 µl). To minimize loss of volume dilute 1:10 by adding 225 µl of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below.
Shelf life: 3 month from despatch.

Pictures:

Western blot of GFP protein detected with polyclonal anti-GFP antibody. Lane 1 shows negative control staining of 20 µg of mouse spleen lysate. Lane 2 shows staining of mouse spleen lysate spiked with 50 ng of wt GFP. This antibody detects a 27 kDa band corresponding to the GFP epitope tag commonly used in recombinant constructs. A 4-20% Tris-Glycine gradient gel was used for SDS-PAGE followed by transfer to nitrocellulose using standard methods. After blocking with 5% BSA in PBS, the membrane was probed for 2 h at room temperature with the primary antibody diluted in 5% BSA to 2 µg/ml, followed by washes and reaction with a 1:20,000 dilution of IRDye(TM)800 Conjugated Affinity Purified anti-Chicken IgG [H&L] [Goat] MX10. The IRDye®(R)800 fluorescence image was captured using the Odyssey(R) Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.