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AP09218HR-N Polyclonal Antibody to GFP (Ads. to Hu, Ms, Rt Serum Proteins) -

Alternate names: GFP-Tag, Green fluorescent protein

Quantity: 0.1 mg

Concentration: 1.0 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: <u>P42212</u>
NCBI: <u>6100</u>

Host / Isotype: Rabbit / IgG

Immunogen: GST- Green Fluorescent Protein (GFP) fusion protein corresponding to the full length

amino acid sequence (246aa) derived from the jellyfish Aequorea victoria.

Format: State: Lyophilized Ig fraction

Purification: This product 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.

Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 10

mg/ml BSA IgG and Protease free, 0.01% (w/v) Gentamicin Sulfate

Label: HRP – Horseradish Peroxidase

Reconstitution: Restore with 0.1 ml of deionized water (or equivalent).

Applications: ELISA: 1/15,000-1/60,000.

Western blot: 1/1,000-1/5,000.

Immunohistochemistry on Frozen Sections: 1/500-1/3,000.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.



HRP

Specificity: This antibody is designed to detect GFP and its variants. It 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.

Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum, anti-Peroxidase and purified and partially purified Green Fluorescent Protein (Aequorea victoria) Serum. No reaction was observed against Human, Mouse

and Rat Serum Proteins.

Species Reactivity: Tested: A. victoria

Storage: Store vial at 2-8°C prior to restoration. Following restoration product can be stored

undiluted at 2-8°C for one month or (in aliquots) at -20°C or below.

Avoid repeated freezing and thawing.

Centrifuge product if not completely clear after standing at room temperature.

Shelf life: One year from despatch.