

Datasheet for Rabbit anti GFP-Tag mAb

Catalog number: mAb-02421-100

Background: The green fluorescent protein (GFP) is a protein composed of 238 amino acid residues (26.9 kDa) that exhibits bright green fluorescence when exposed to light in the blue to ultraviolet range. Although many other marine organisms have similar green fluorescent proteins, GFP traditionally refers to the protein first isolated from the jellyfish *Aequorea victoria*. The GFP from *A. victoria* has a major excitation peak at a wavelength of 395 nm and a minor one at 475 nm. Its emission peak is at 509 nm, which is in the lower green portion of the visible spectrum. The fluorescence quantum yield (QY) of GFP is 0.79. The GFP from the sea pansy (*Renilla reniformis*) has a single major excitation peak at 498 nm. GFP makes for an excellent tool in many forms of biology due to its ability to form internal chromophore without requiring any accessory cofactors, gene products, or enzymes / substrates other than molecular oxygen. In cell and molecular biology, the GFP gene is frequently used as a reporter of expression. It has been used in modified forms to make biosensors, and many animals have been created that express GFP, which demonstrates a proof of concept that a gene can be expressed throughout a given organism, in selected organs, or in cells of interest. GFP can be introduced into animals or other species through transgenic techniques, and maintained in their genome and that of their offspring. To date, GFP has been expressed in many species, including bacteria, yeasts, fungi, fish and mammals, including in human cells. Scientists Roger Y. Tsien, Osamu Shimomura, and Martin Chalfie were awarded the 2008 Nobel Prize in Chemistry on 10 October 2008 for their discovery and development of the green fluorescent protein.

■ Product Information

Symbol: GFP
Alias: GFP;GFP tag;GFP-tag
Cross reactivity: Species independent
Expected Protein Weight:
Species:
Source: Rabbit
Isotype: IgG
Purity: Affinity purification
Storage: Store at -20°C. Avoid freeze / thaw cycles. | Buffer: PBS with 0.09% sodium azide, 0.05% BSA, 50% glycerol, pH 7.3.

■ Immunogen Information

Gene ID:
Swiss:
Immunogen: Recombinant protein of human GFP-Tag.

■ Recommended Dilutions

WB 1:2000 - 1:6000
IP 0.5 µg-4 µg antibody for 200 µg-400 µg extracts of whole cells
ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Citation of product: If use of this item results in a publication, please use this information: Rabbit anti GFP-Tag mAb(mAb-02421-100; Genecopoeia, Inc, Rockville, MD).

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