

Mouse anti GFP-Tag mAb

Catalog No.: AE012

265 Publications

Basic Information

Observed MW

27 kDa/70 kDa

Calculated MW

27 kDa

Category

Tag antibody

Applications

WB,IP,IF/ICC

Cross-Reactivity

Species independent

CloneNo number

AMC0483R

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 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.

Recommended Dilutions

WB	1:1000 - 1:10000
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IP	0.5 µg-4 µg antibody for 200 µg-400 µg extracts of whole cells
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IF/ICC	1:100-1:1000
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Immunogen Information

Gene ID

Swiss Prot

P42212

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

GFP;GFP tag;GFP-tag

Contact

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Product Information

Source

Mouse

Isotype

IgG1,Kappa

Purification

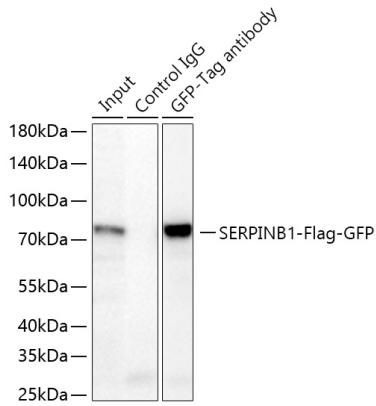
Affinity purification

Storage

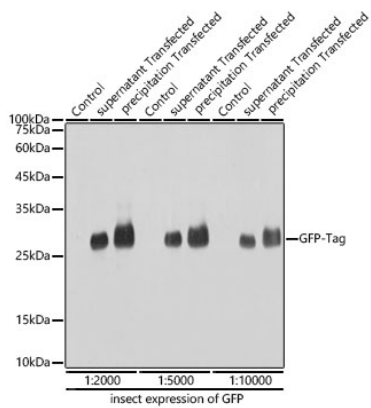
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide,50% glycerol,pH7.3.

Validation Data



Immunoprecipitation of SERPINB1-Flag-GFP from 200 μ g extracts of 293T cells transfected with a SERPINB1 expression vector containing a single N-terminal Flag-GFP-Tag was performed using 2 μ g of Mouse anti GFP-Tag mAb (AE012). Mouse Control IgG (AC011) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Rabbit anti GFP-Tag mAb (AE078) at a dilution of 1:100000.



Western blot analysis of insect expressed GFP protein using Mouse anti GFP-Tag mAb (AE012) at different dilution at 1:1000.

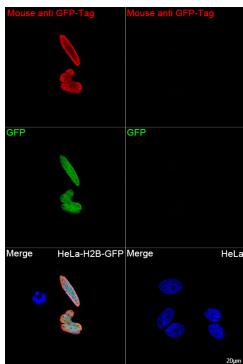
Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.

Lysates/proteins: 25 μ g per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1s.



Confocal imaging of HeLa cells transfected with H2B-GFP using Mouse anti GFP-Tag mAb (AE012, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Mouse IgG (H+L) (AS008, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.