AE012

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Mouse anti GFP-Tag mAb

Catalog No.: AE012 **241 Publications**

Basic Information

Observed MW
27kDa/68kDa

Calculated MW
27kDa

Category
Monoclonal Antibody

Applications
WB,IP

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	1:5000 - 1:10000
IP	0.5μg-4μg antibody for 200μg-400μg extracts of whole cells

Immunogen Information

Gene ID

Swiss Prot
P42212

Immunogen
A synthetic peptide corresponding to a sequence within amino acids 1-100 to the N-terminus of GFP protein (P42212).

Synonyms
GFP;GFP tag;GFP-tag

Contact

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Product Information

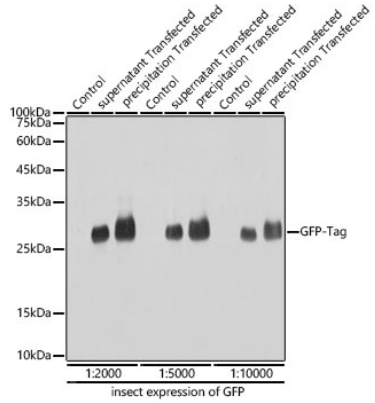
Source
Mouse

Isotype
IgG1,Kappa

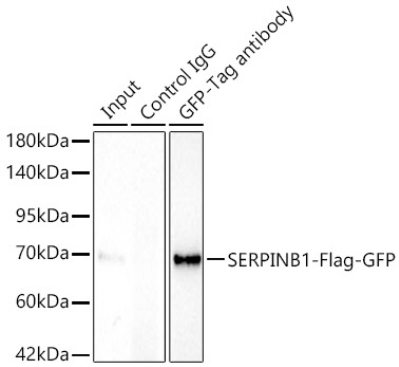
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.

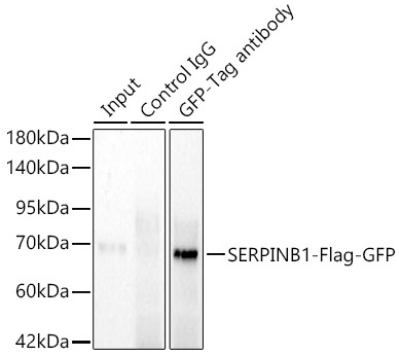
Validation Data



Western blot analysis of insect expressed GFP protein using Mouse anti GFP-Tag mAb (AE012) at different dilution.
Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1s.



Immunoprecipitation of SERPINB1-Flag-GFP from 300 µg extracts of 293T cells transfected with a SERPINB1 expression vector containing a single N-terminal Flag-GFP-Tag was performed using 3 µg 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 DDDDK-Tag mAb (AE063) at a dilution of 1:5000.



Immunoprecipitation of SERPINB1-Flag-GFP from 300 µg extracts of 293T cells transfected with a SERPINB1 expression vector containing a single C-terminal Flag-GFP-Tag was performed using 3 µg 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 DDDDK-Tag mAb (AE063) at a dilution of 1:5000.