# Rabbit anti GFP-Tag mAb

Catalog No.: AE078 6 Publications



### **Basic Information**

#### **Observed MW**

27kDa

#### **Calculated MW**

27kDa

### Category

Tag antibody

#### **Applications**

WB,IF/ICC,IP,ELISA,CHIP

#### **Cross-Reactivity**

Species independent

#### CloneNo number

ARC50809

### **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.

## **Recommended Dilutions**

**WB** 1:50000 - 1:700000

**IF/ICC** 1:50 - 1:200

**IP** 0.5μg-4μg antibody for

 $100\mu g$ - $400\mu g$  extracts of

whole cells

**ELISA** Recommended starting

concentration is 1 µg/mL.

Please optimize the
concentration based on
your specific assay
requirements.

**CHIP** 5μg antibody for

10μg-15μg of Chromatin

### **Contact**

### **Immunogen Information**

Gene ID Swiss Prot P42212

#### **Immunogen**

Recombinant fusion protein containing a sequence corresponding to amino acids 1-238 of GFP.

### **Synonyms**

GFP;GFP tag;GFP-tag

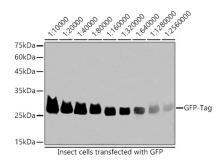
### **Product Information**

SourceIsotypePurificationRabbitIgGAffinity purification

#### Storage

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

Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.



Western blot analysis of lysates from insect cells transfected with GFP using Rabbit anti GFP-Tag mAb (AE078) at 1:10000-1:2560000 dilution incubated overnight at  $4^{\circ}$ C.

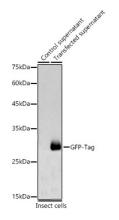
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 20 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020)

.Exposure time: 3s.



Western blot analysis of lysates from wild type (WT) and insect cells transfected with GFP using Rabbit anti GFP-Tag mAb (AE078) at 1:200000 dilution incubated overnight at  $4^{\circ}$ C.

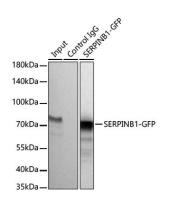
anti di F-ray mab (AL076) at 1.200000 dilution incubated overnight at 4 C.

 $Secondary\ antibody:\ HRP-conjugated\ Goat\ anti-Rabbit\ IgG\ (H+L)\ (AS014)\ at\ 1:10000\ dilution.$ 

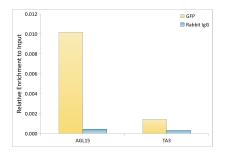
Lysates/proteins: 20 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

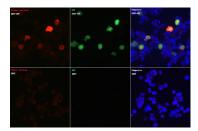
Detection: ECL Basic Kit (RM00020) .Exposure time: 30s.



Immunoprecipitation of SERPINB1-GFP from 150  $\mu g$  extracts of 293F cells transfected with a SERPINB1 expression vector containing a single N-terminal GFP-Tag was performed using 3  $\mu g$  of Rabbit anti GFP-Tag mAb (AE078). Rabbit IgG isotype control (AC042) was used to precipitate the Control IgG sample. The IP sample was eluted with 1X reducing Laemmli Buffer. The Input lane represents 10 % of the total input. Western blot analysis of immunoprecipitates was conducted using Mouse anti GFP-Tag mAb ( AE012) at a dilution of 1:5000.



Chromatin immunoprecipitation was performed with cross-linked chromatin from Arabidopsis thaliana leaf cells transfered with GFP, using Rabbit anti GFP-Tag mAb (AE078) and Rabbit IgG (AC042). The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram compares the ratio of the immunoprecipitated DNA versus the input.



Immunofluorescence analysis of 293T and 293T-GFP cells using Rabbit anti GFP-Tag mAb (AE078) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.