Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Rabbit anti GFP-Tag mAb

Catalog No.: AE078 **35 Publications**

Basic Information

Observed MW
27 kDa

Calculated MW
27 kDa

Category
Tag antibody

Applications
WB,IP,IF/ICC,ChIP,ELISA

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	1:5000 - 1:20000
IP	0.5 μg - 4 μg antibody for 100 μg - 400 μg extracts of whole cells
IF/ICC	1:200 - 1:2000
ChIP	5 μg antibody for 10 μg - 15 μg of Chromatin
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

Swiss Prot
P42212

Immunogen
Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms
GFP;GFP tag;GFP-tag

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

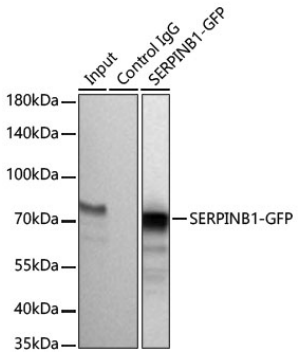
Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Contact

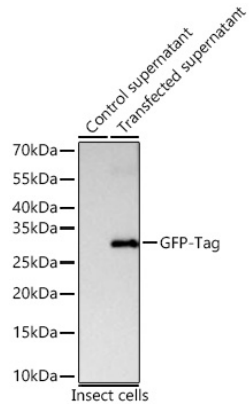
400-999-6126

cn.market@abclonal.com.cn

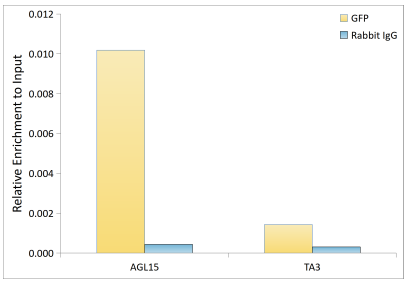
Validation Data



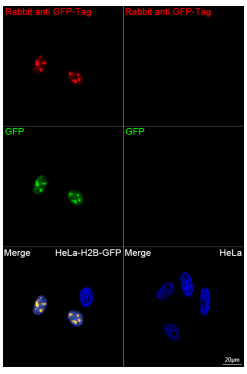
Immunoprecipitation of SERPINB1-GFP from 150 µg extracts of 293F cells transfected with a SERPINB1 expression vector containing a single N-terminal GFP-Tag was performed using 3 µg of Rabbit anti GFP-Tag mAb (AE078). Rabbit IgG isotype control (AC042) was used to precipitate the Control IgG sample. The 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.



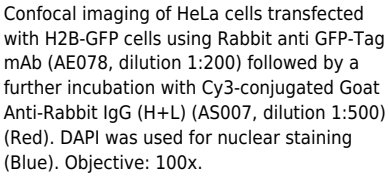
Western blot analysis of lysates from wild type (WT) and insect cells transfected with GFP using Rabbit anti GFP-Tag mAb (AE078) at 1:11000 dilution incubated at room temperature for 1.5 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020)
.Exposure time: 45s.



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.



Validation Data



Confocal imaging of HeLa cells transfected with H2B-GFP cells using Rabbit anti GFP-Tag mAb (AE078, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.