ABclonal®

Rabbit anti GFP-Tag pAb

Catalog No.: AE011 81 Publications

Basic Information

Observed MW

25kDa

Calculated MW

27kDa

Category

Polyclonal Antibody

Applications

WB,IF/ICC

Cross-Reactivity

Species independent

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 1:2000 - 1:20000

IF/ICC 1:50 - 1:200

Immunogen Information

Gene ID Swiss Prot

Immunogen

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

Synonyms

GFP;GFP tag;GFP-tag

Contact

www.abclonal.com

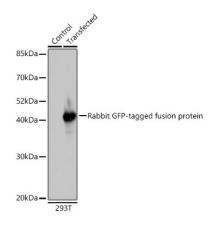
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

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

Validation Data



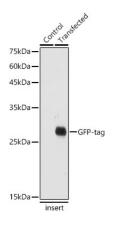
Western blot analysis of extracts of normal 293T cells and 293T transfected with GFP-tagged fusion protein, using Rabbit anti GFP-Tag pAb (AE011) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 10s.



Western blot analysis of extracts of normal Eukaryotic expression of GFP and Eukaryotic expression of GFP transfected with GFP Protein, using Rabbit anti GFP-Tag pAb (AE011) at 1:20000 dilution.

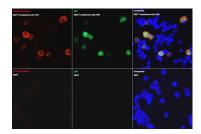
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1s.



Immunofluorescence analysis of 293T and 293T-GFP cells using Rabbit anti GFP-Tag pAb (AE011) at dilution of 1:50 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.