

THE™ GFP Antibody, pAb, Rabbit

Cat. No.: A01704-200

Size: 200 µg

Synonyms: Green Fluorescent Protein antibody;

Description:

Green fluorescence protein (GFP) is a 27 kDa protein derived from jellyfish *Aequorea victoria*. It emits green light (emission peak at a wavelength of 509 nm) when excited by blue light (excitation peak at a wavelength of 395 nm). GFP has become a very useful tool as a fusion protein to report gene expression, trace cell lineage and define subcellular protein localizations. YFP differs from GFP due to a mutation at T203Y.

GenScript THE™ GFP Antibody, pAb, Rabbit is developed in rabbit using purified recombinant full-length GFP protein.

Immunogen: purified recombinant full-length GFP protein

Host: Rabbit

Conjugation: Unconjugated

Formulation:

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide

Ig Subclass: IgG

Specificity: **GenScript THE™ GFP Antibody, pAb, Rabbit** specifically reacts with fusion proteins containing GFP epitope tag. This antibody can recognize all variants of GFP protein such as eGFP, AcGFP1 and cGFP. It slightly recognizes a

variety of variants of RFP protein such as DsRed, DsRed2, mOrange, mCherry and tdTomato.

Purification: Immunoaffinity chromatography

Applications:

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western blot: 0.2-1 µg/ml

Immunoprecipitation: 1-5 µg/ml

Flow cytometry: 1-3 µg for 1 x 10⁶ cells

ICC/IF: 1-3 µg/ml

Other Applications: user optimized

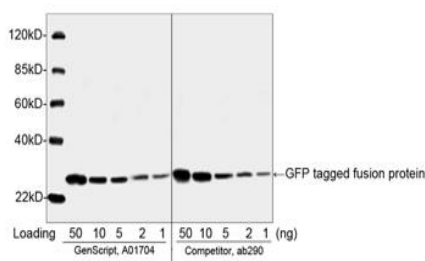
Reconstitution:

Reconstitute the lyophilized powder with deionized water (or equivalent) to an antibody concentration of 0.5 mg/ml.

Storage:

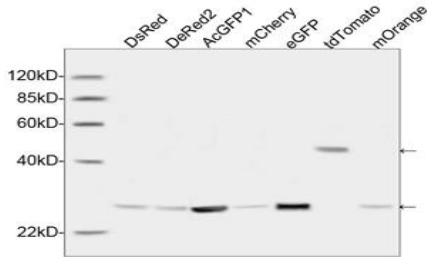
The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example

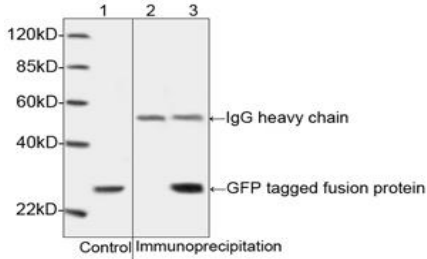


Comparison of THE™ GFP Antibody, pAb, Rabbit (Left: GenScript, A01704, 0.2 µg/ml) with Rabbit Anti-GFP pAb (Right: Competitor, ab290, 1:5000) by Western blot.

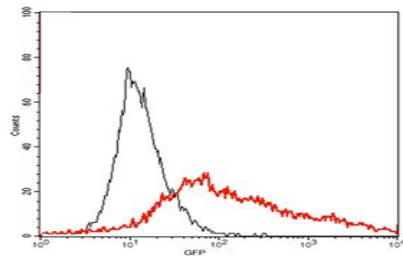
The assay was performed with GFP-tagged fusion protein. The signal was developed with IRDye™ 800 Conjugated Goat Anti-Rabbit IgG



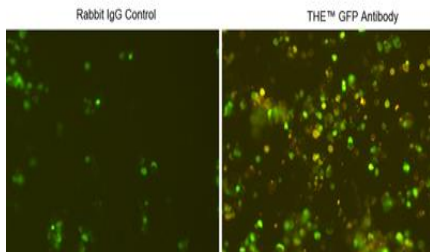
Specificity analysis of THE™ GFP Antibody, pAb, Rabbit (GenScript, A01704) by Western blot, using a variety of variants of GFP protein such as eGFP and AcGFP1, and a variety of variants of RFP protein such as DsRed, DeRed2, mCherry, tdTomato and mOrange. The signal was developed with IRDye™ 800 Conjugated Rabbit Anti-Rabbit IgG.



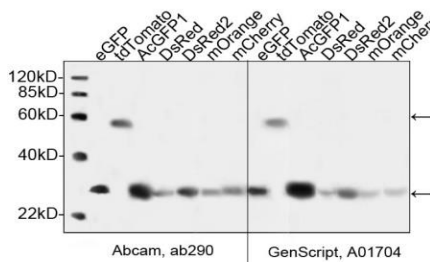
Western blot analysis of cell lysates containing GFP tagged fusion protein and its immunoprecipitates.
 1: Cell lysates containing GFP tagged fusion protein as input control.
 2: Immunoprecipitates of the cell lysates incubated with Rabbit IgG Control (GenScript, A01008) as negative control.
 3: Immunoprecipitates of the cell lysates incubated with THE™ GFP Antibody, pAb, Rabbit (GenScript, A01704).



Flow cytometric analysis of non-transfected or GFP fusion gene transfected HEK293 cells using THE™ GFP Antibody, pAb, Rabbit (GenScript, A01704) (black and red, respectively). The signal was developed with R-PE conjugated Goat Anti-Rabbit IgG.



Immunocytochemistry/Immunofluorescence analysis of GFP fusion gene transfected HEK293 cells using THE™ GFP Antibody, pAb, Rabbit (GenScript, A01704) and Rabbit IgG Control (Whole Molecule), Purified (GenScript, A01008). The signal was developed with R-PE conjugated Goat Anti-Rabbit IgG.



Comparison of THE™ GFP Antibody, pAb, Rabbit (Left: GenScript, A01704, 0.2 µg/ml) with Rabbit Anti-GFP pAb (Right: Competitor, ab290, 1:5000) by Western blot. The assay was performed with GFP-tagged fusion protein. The signal was developed with IRDye™ 800 Conjugated Goat Anti-Rabbit IgG.