

Rev06
Update: Jan,07,2025

DATASHEET

THE™ GFP Antibody, pAb, Rabbit

Cat. No.: A01704

Overview

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.
Host Species	Rabbit
Immunogen	purified recombinant full-length GFP protein
Conjugate	Unconjugated

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.

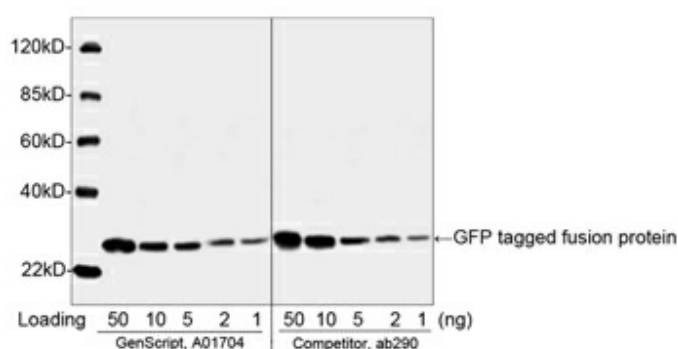
Application	Recommended Usage
Western Blot	0.2-1 µg/ml
Immunoprecipitation (IP)	1-5 µg/ml
Flow Cytometry	1-3 µg for 1 x 10 ⁶ cells
Immunocytochemistry/Immunofluorescence (ICC/IF)	1-3 µg/ml

Properties

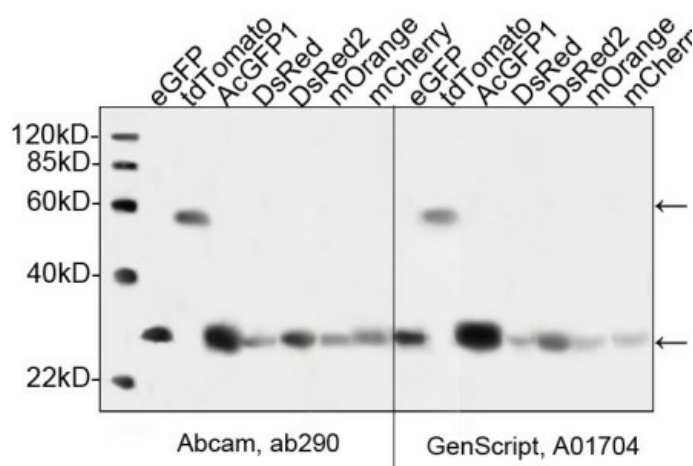
Form	Lyophilized
Storage Buffer	lyophilized with PBS, pH 7.4, containing 0.02% sodium azide
Reconstitution	Reconstitute the lyophilized powder with deionized water (or equivalent) to an final concentration of 0.5 mg/mL.

Storage Instructions	The lyophilized product remains stable for up to 1 year at -20 °C from the date of receipt. Upon reconstitution, it can be stored for 2-3 weeks at 2-8 °C or for up to 12 months at -20 °C or below. Avoid repeated freezing and thawing cycles.
Purification	Affinity chromatography
Isotype	Rabbit IgG
Clonality	Polyclonal
Clone ID	Not applicable
Note	Small volumes of antibody will occasionally become entrapped in the seal of the product vial during shipment and storage. Before use, briefly centrifuge the vial to dislodge any liquid in the container's cap.

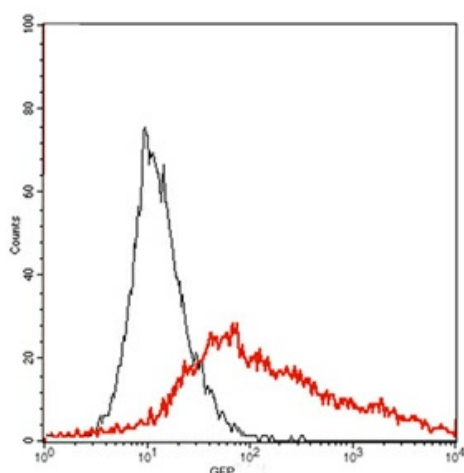
Examples



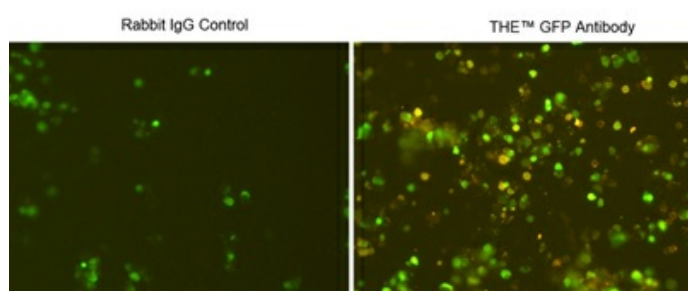
Comparison of THETM GFP Antibody, pAb, Rabbit (Left: GenScript, A01704, 0.2 µg/ml) with Rabbit Anti-GFP pAb (Right: Competitor, ab290, 1:5000) by Western blot. The assay was performed with GFP-tagged fusion protein. The signal was developed with IRDyeTM 800 Conjugated Goat Anti-Rabbit IgG



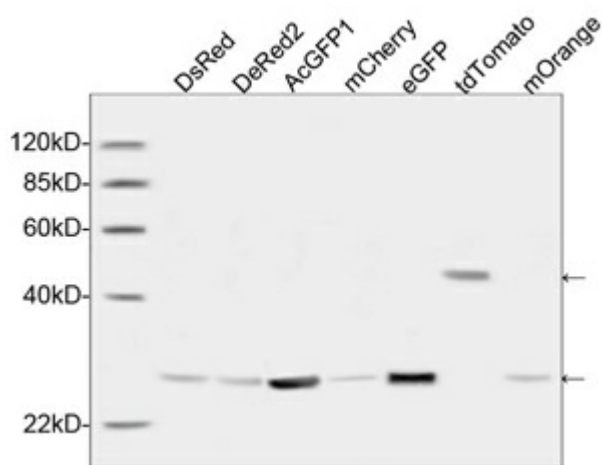
Comparison of THETM GFP Antibody, pAb, Rabbit (Left: GenScript, A01704, 0.2 µg/ml) with Rabbit Anti-GFP pAb (Right: Competitor, ab290, 1:5000) by Western blot. The assay was performed with GFP-tagged fusion protein. The signal was developed with IRDyeTM 800 Conjugated Goat Anti-Rabbit IgG.



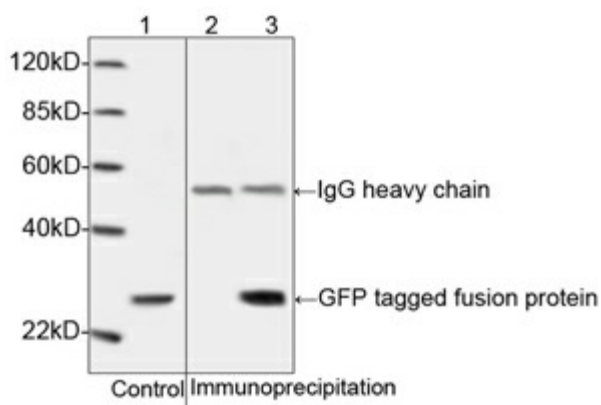
Flow cytometric analysis of non-transfected or GFP fusion gene transfected HEK293 cells using THE™ GFP Antibody, pAb, Rabbit (GenScript, A01704) (black and red, respectively). The signal was developed with R-PE conjugated Goat Anti-Rabbit IgG.



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.



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).

Background

Target Background : 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.

Synonyms : Green Fluorescent Protein antibody;

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.

Manufacturer: Nanjing GenScript Biotech Co., Ltd. No. 28 Yongxi Road, Jiangning District, Nanjing, Jiangsu, China