

Product datasheet for **TA397409S**

GFP Goat Polyclonal Antibody

Product data:

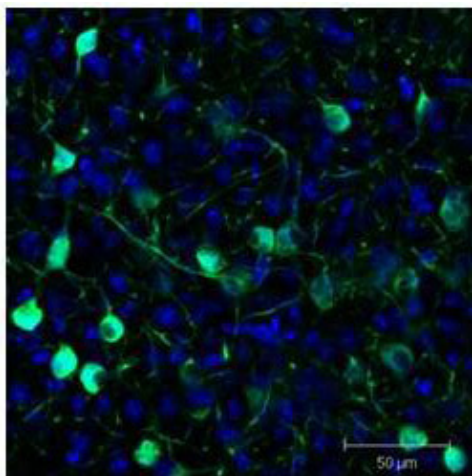
Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, IP, WB
Recommended Dilution:	WB: 1:1,000 - 1:10,000 IHC: 1:200 - 1:1,000 IF: 1:500 ELISA: 1:10,000 - 1:30,000
Host:	Goat
Clonality:	Polyclonal
Immunogen:	The immunogen is a Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish <i>Aequorea victoria</i> .
Specificity:	GFP antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Green Fluorescent Protein (<i>Aequorea victoria</i>) coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum and purified and partially purified Green Fluorescent Protein (<i>Aequorea victoria</i>). No reaction was observed against Human, Mouse or Rat serum proteins.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.1 mg/mL - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.
Database Link:	<u>P42212</u>



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- Background:** Green fluorescent protein is a 27 kDa protein produced from the jellyfish *Aequorea victoria*, which emits green light (emission peak at a wavelength of 509nm) when excited by blue light. GFP is an important tool in cell biology research. GFP is widely used enabling researchers to visualize and localize GFP-tagged proteins within living cells without the need for chemical staining.
- Synonyms:** goat anti-GFP antibody, GFP, Green Fluorescent Protein, GFP antibody, Green Fluorescent Protein antibody, EGFP, enhanced Green Fluorescent Protein, *Aequorea victoria*, Jellyfish
- Note:** Anti-GFP is designed to detect GFP and its variants. Goat Anti-GFP has been tested by ELISA, Western blot, and Immunofluorescence. This product is ideal for western blotting, ELISA, immunofluorescence, IHC, and IP. This antibody can be used to detect GFP by ELISA (sandwich or capture) for the direct binding of antigen and recognizes wild type, recombinant and enhanced forms of GFP. Biotin conjugated polyclonal anti-GFP used in a sandwich ELISA is well suited to titrate GFP in solution using this antibody in combination with Rockland's monoclonal anti-GFP (600-301-215) using either form of the antibody as the capture or detection antibody. However, use the monoclonal form only for the detection of wild type or recombinant GFP as this form does not sufficiently detect 'enhanced' GFP. The detection antibody is typically conjugated to biotin and subsequently reacted with streptavidin-HRP (code # S000-03). Fluorochrome conjugated polyclonal anti-GFP can be used to detect GFP by immunofluorescence microscopy in prokaryotic (*E.coli*) and eukaryotic (CHO cells) expression systems and detects GFP containing inserts. Significant amplification of signal is achieved using fluorochrome conjugated polyclonal anti-GFP relative to the fluorescence of GFP alone. For immunoblotting use either alkaline phosphatase or peroxidase conjugated polyclonal anti-GFP to detect GFP or GFP-containing proteins on western blots. Researchers should determine optimal titers for applications.

Product images:



Immunofluorescence Microscopy of GFP-GOAT-Antibody. Tissue: Sf-1:Cre mice crossed to the Z/EG reporter line. Mouse brain (coronal view, 20X magnification). Fixation: 4%PFA/PBS with o/n fixation, and subsequently transferred to a 30% sucrose solution. Antigen retrieval: frozen in OCT freezing medium (Sakura) and cryostat sectioned at 40 microns. Primary antibody: Goat anti-GFP was used at 1:500 dilution in free floating immunohistochemistry to detect GFP. Secondary antibody: Fluorochrome conjugated Anti-goat IgG secondary antibody was used for detection at 1:500 at 1:10,000 for 45 min at RT. Localization: Sf-1+ neurons and their processes of the ventromedial nucleus of the hypothalamus. Staining: eGFP as green fluorescent signal and sections were counterstained with DAPI.