

## Product datasheet for **R1091B**

### GFP (Ads. to Hu, Ms, Rt Serum Proteins) Goat Polyclonal Antibody

#### Product data:

**Product Type:** Primary Antibodies

**Applications:** ELISA, IF, IHC, WB

**Recommended Dilution:** Polyclonal anti-GFP antibody is designed to detect GFP and its variants. 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 antibody used in a Sandwich ELISA is well suited to titrate GFP in solution using this antibody in combination with a monoclonal anti-GFP antibody (Cat#R1461P) using either form of the antibody as the capture or detection antibodies. 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 conjugated HRP. Fluorochrome conjugated polyclonal anti-GFP antibody can be used to detect GFP by immunofluorescence microscopy in prokaryotic (E.coli) and eukaryotic (CHO cells) expression systems and can detect GFP containing inserts. Significant amplification of signal is achieved using fluorochrome conjugated polyclonal anti-GFP antibody relative to the fluorescence of GFP alone.

For Immunoblotting use either alkaline phosphatase or peroxidase conjugated polyclonal anti-GFP antibody to detect GFP or GFP containing proteins on western blots.

**Recommended Dilutions:**

ELISA: 1/50,000-1/80,000.

Western blot: 1/2,000-1/10,000.

Immunohistochemistry: 1/1,000-1/5,000.

**Reactivity:** A. victoria

**Host:** Goat

**Clonality:** Polyclonal

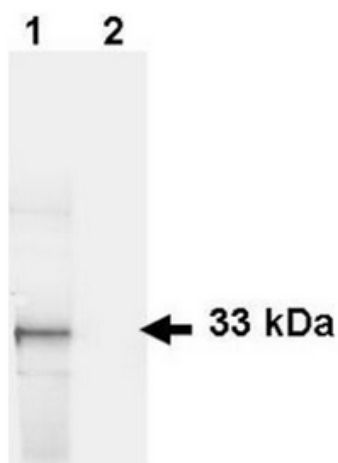
**Immunogen:** GST-Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246 aa) derived from the *jellyfish Aequorea victoria*.



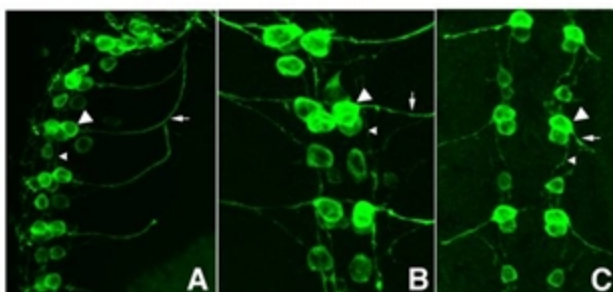
[View online »](#)

<b>Specificity:</b>	<p>This 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, anti-biotin and purified and partially purified Green Fluorescent Protein (<i>Aequorea victoria</i>) Serum.</p> <p>No reaction was observed against Human, Mouse and Rat Serum Proteins.</p>
<b>Formulation:</b>	<p>0.02M Potassium Phosphate, 0.15M Sodium Chloride, pH 7.2, 0.01% (w/v) Sodium Azide as preservative and 10 mg/ml BSA (IgG and Protease free) as stabilizer.</p> <p>Label: Biotin</p> <p>State: Lyophilized purified Ig fraction</p> <p>Label: Biotinamidocaproate N-Hydroxysuccinimide Ester (BAC)</p> <p>Molar ratio: 10-20 BAC molecules per Goat IgG molecule</p>
<b>Reconstitution Method:</b>	Restore with 1.0 ml of deionized water (or equivalent).
<b>Concentration:</b>	lot specific
<b>Purification:</b>	Immunoaffinity Chromatography
<b>Conjugation:</b>	Biotin
<b>Storage:</b>	<p>Store vial at 2-8°C prior to restoration. Centrifuge product if not completely clear after standing at room temperature. This product is stable for one month at 2-8°C as an undiluted liquid. For extended storage aliquot contents and freeze at -20°C or below.</p> <p>Dilute only prior to immediate use.</p> <p>Avoid cycles of freezing and thawing.</p>
<b>Stability:</b>	Shelf life: One year from despatch.
<b>Database Link:</b>	<a href="#">P42212</a>
<b>Background:</b>	<p>Green fluorescence protein (GFP) is a 27 kDa protein derived from the jellyfish <i>Aequorea victoria</i>, which emits green light (emission peak at a wavelength of 509 nm) when excited by blue light (excitation peak at a wavelength of 395 nm). Green Fluorescent Protein (GFP) has become an invaluable tool in cell biology research, since its intrinsic fluorescence can be visualized in living cells. GFP fluorescence is stable under fixation conditions and suitable for a variety of applications. GFP has been widely used as a reporter for gene expression, enabling researchers to visualize and localize GFP-tagged proteins within living cells without the need for chemical staining. Other applications of GFP include assessment of protein protein interactions through the yeast two hybrid system and measurement of distance between proteins through fluorescence energy transfer (FRET) protocols. GFP technology has considerably contributed to a greater understanding of cellular physiology.</p> <p>YFP differs from GFP due to a mutation at T203Y; antibodies raised against full-length GFP should also detect YFP and other variants.</p>
<b>Synonyms:</b>	Green fluorescent protein, GFP-Tag

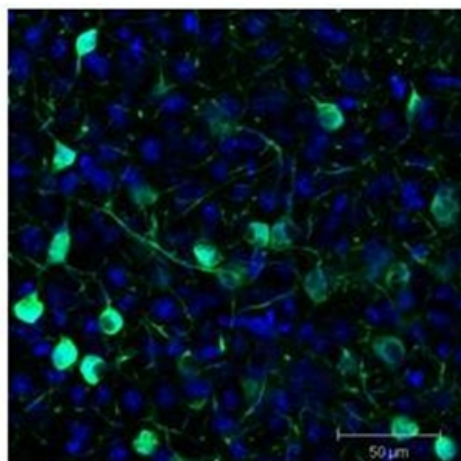
## Product images:



Western blot of GFP recombinant protein detected with Polyclonal anti-GFP antibody. Lane 1 shows detection of a 33 kDa band corresponding to a GFP containing recombinant protein (arrowhead) expressed in HeLa cells. Lane 2 shows no staining of a mock transfected cell.



Polyclonal anti-GFP antibody at a 1/1,000 dilution detects tau-GFP in cell bodies (large arrowhead) and axons of motor neurons (arrow) and interneurons (small arrowhead) in *Drosophila melanogaster* late stage embryonic central nervous system. Fluorochrome co-localization.



Sf-1+ neurons and their processes of the ventromedial nucleus of the hypothalamus in *Mus musculus* (coronal view, 20X magnification). Briefly, Sf-1:Cre mice (Jackson Mouse Laboratories) were crossed to the Z/EG reporter line. Brains were harvested following perfusion.