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Datasheet for 600-106-215

# GFP (GOAT) Antibody Biotin Conjugated

## Overview

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| **Description:** | Anti-GFP (GOAT) Antibody Biotin Conjugated - 600-106-215 |
| **Item No.:** | 600-106-215 |
| **Size:** | 1 mg |
| **Applications:** | ELISA, WB, EM, FC, IF, IHC, IP, Multiplex, Other, Purification |
| **Reactivity:** | GFP, eGFP, rGFP |
| **Host Species:** | Goat |

## Product Details

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| **Background:** | Conjugated Anti-GFP is ideal for western blotting, ELISA and Immunohistochemistry. 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 biotin Conjugation, biotin conjugated goat anti-GFP antibody, Green Fluorescent Protein, GFP antibody, Green Fluorescent Protein antibody, EGFP, enhanced Green Fluorescent Protein, Aequorea victoria, Jellyfish |
| **Host Species:** | Goat |
| **Conjugate:** | Biotin |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Reactivity:** | GFP, eGFP, rGFP |
| **Immunogen Type:** | Recombinant Protein |
| **Immunogen:** | Recombinant Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish Aequorea victoria. |

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| **Purity/Specificity:** | Anti-GFP was prepared from monospecific antiserum by immunoaffinity chromatography using Green Fluorescent Protein (Aequorea victoria) 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 (Aequorea victoria) Serum. No reaction was observed against Human, Mouse and Rat Serum Proteins. |
| **Relevant Links:** | • UniProtKB - P42212 |

## Application Details

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| **Tested Applications:** | ELISA, WB |
| **Suggested Applications:** | EM, FC, IF, IHC, IP, Multiplex, Other, Purification (Based on references) |
| **Application Note:** | Anti-GFP Biotin Conjugated Antibody has been tested by ELISA and western blot and is suitable for immunoblotting, ELISA, immunohistochemistry, immunomicroscopy as well as other antibody based assays using streptavidin or avidin conjugates requiring lot-to-lot consistency. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:50,000 - 1:80,000 |
| **IHC:** | 1:1,000 - 1:5,000 |
| **WB:** | 1:2,000 - 1:10,000 |

## Formulation

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| **Physical State:** | Lyophilized |
| **Concentration:** | 1.0 mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.01% (w/v) Sodium Azide |
| **Stabilizer:** | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| **Reconstitution Volume:** | 1.0 mL |
| **Reconstitution Buffer:** | Restore with deionized water (or equivalent) |

## Shipping & Handling

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| **Shipping Condition:** | Ambient |

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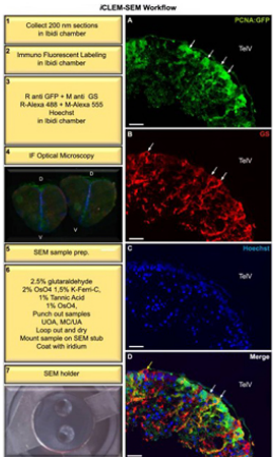
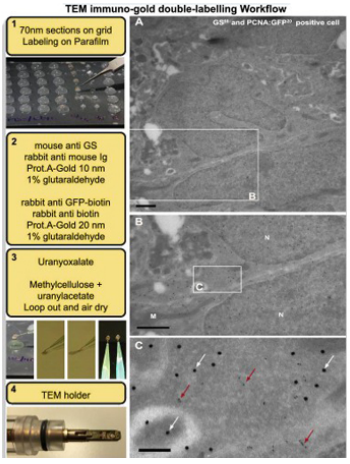
| **Storage Condition:** | Store Anti-GFP at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

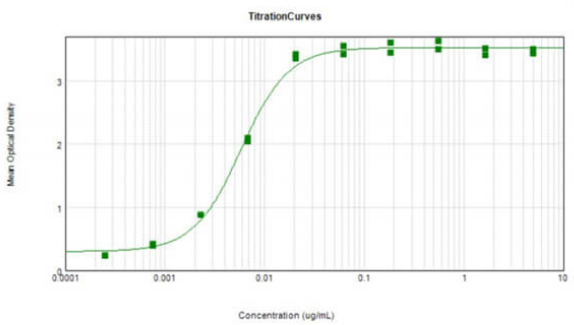
## Images




**Immunofluorescence Microscopy**
iCLEM-SEM workflow and immunofluorescent labelling on Tokuyasu chemical-fixed cryosections. Left: Major steps required for iCLEM-SEM workflow (steps 1–6). (A) Green Fluorescent Protein (GFP)-positive labelling (green) of proliferating cells from the Tg(PCNA:GFP) transgenic line (white arrows). (B) Glutamine Synthetase (GS)-positive labelling (red) of glial cells (white arrows). (C) Hoechst counterstaining (blue). (D) Multi-channel merge showing co-labelling of PCNA:GFP-positive cells with the glial marker (orange cells; white arrows) in the cytoplasm of a small number of cells. Differences in the intensity of antibody staining can additionally be noted (compare white arrows and yellow arrow). D dorsal; V ventral. TelV telencephalic ventricle. Scale bar (A–D) 20 µm. Fig 2. PMID: 33441723




**Immunofluorescence Microscopy**
TEM immuno-gold double-labelling workflow and example of positive labelling on Tokuyasu chemical-fixed cryosections. Left: Major steps (1–4) required for TEM immuno-gold double-labelling workflow and associated images. (A,B,C) Cytosolic PCNA:GFP+/GS+ immuno-gold double-labelling at low (A) and high (B,C) magnifications demonstrating co-localization of the 10 nm (GS; red arrowheads) and 20 nm (PCNA:GFP; white arrowheads) particles. N, nucleus. Scale bar (A) 2 µm; (B,C) 200 nm. Fig 6. PMID: 33441723




**ELISA**
ELISA Results of Goat Anti-GFP Antibody tested against purified GFP protein. Each well was coated in duplicate with 10µg/mL of GFP protein (p/n 000-001-215). The starting dilution of antibody was 5µg/mL and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% Fish Gel/PBS Blocking buffer (p/n MB-066) and SA-HRP conjugated (p/n S000-03).

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