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Datasheet for 600-105-215

GFP Antibody Alkaline Phosphatase Conjugated

Overview

Description:	Anti-GFP (GOAT) Antibody Alkaline Phosphatase Conjugated - 600-105-215
Item No.:	600-105-215
Size:	1 mg
Applications:	Dot Blot, ELISA, WB
Reactivity:	GFP, eGFP, rGFP
Host Species:	Goat

Product Details

Background:	Conjugated GFP antibody 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 alkaline phosphatase Conjugation, alk phos 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:	Alkaline Phosphatase (AP)
Clonality:	Polyclonal
Format:	IgG

Target Details

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.

Purity/Specificity:	Anti-GFP Antibody 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-Alkaline Phosphatase 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

Tested Applications:	Dot Blot, ELISA, WB
Application Note:	Anti-GFP is designed to detect GFP and its variants. Anti-GFP Alkaline Phosphatase conjugated antibody has been tested by ELISA, dot blot, and western blot. 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 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 (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 can detect 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
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:8,000
IF:	1:200 - 1:1,000
IHC:	1:200 - 1:1,000
WB:	1:500 - 1:2,500

Formulation

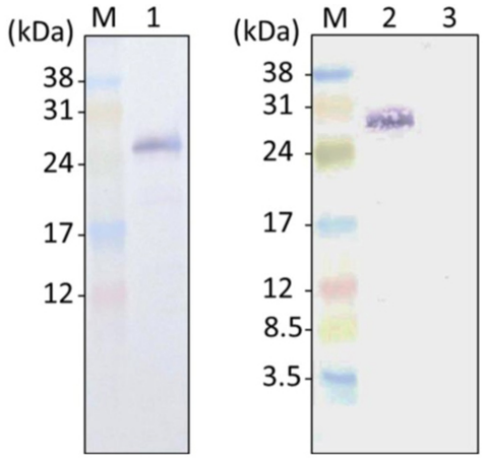
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.05 M Tris Chloride, 0.15M Sodium Chloride, 0.001M Magnesium Chloride, 0.0001M Zinc Chloride, 50% (v/v) Glycerol; pH 8.0

Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

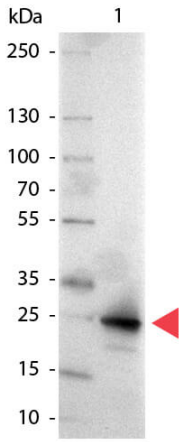
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C before opening. DO NOT FREEZE. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. Freezing alkaline phosphatase conjugates will result in a substantial loss of enzymatic activity.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Green fluorescence protein (GFP) detection with Western blotting from F. solaris JPCC DA0580 transformants expressing neat GFP (Lane 1); SDOAP1-GFP (Lane 2); and wild-type cells (Lane 3). Lane M represents molecular marker. Fig 1. PMID: 24983635



Western Blot
Western Blot of Alkaline Phosphatase conjugated Goat anti-GFP antibody. Lane 1: GFP. Lane 2: none. Load: 50 ng per lane. Primary antibody: none. Secondary antibody: Alkaline Phosphatase GFP secondary antibody at 1:1000 for 60 min at RT. Block: MB-070 for 30 min RT. Predicted/Observed size: 28 kDa for GFP. Other band(s): none.

Dot Blot
Dot Blot of GFP Antibody Alkaline Phosphatase Conjugated. Antigen: GFP. Load: Lane 1 - 100ng Lane 2 - 33.33ng Lane 3 - 11.11ng Lane 4 - 3.70ng Lane 5 - 1.23ng. Primary antibody: n/a. Secondary antibody: GFP Antibody Alkaline Phosphatase Conjugated at 1:1,000 for 60 min at RT. Block: MB-070 for 60 min at RT. Visualized using Alkaline Phosphatase Substrate.

References

- Maeda, Y et al. Peptide-mediated microalgae harvesting method for efficient biofuel production. *Biotechnology for Biofuels* (2016)
- Maeda, Y et al. Oleosome-associated protein of the oleaginous diatom Fistulifera solaris contains an endoplasmic reticulum-targeting signal sequence. *Marine Drugs* (2014)

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