

Certificate of Analysis

Product: Monoclonal anti-Green Fluorescent Protein [Mouse]

Code: 600-301-215

Lot # 19303

Size: 1.0 mg

Isotype: γ_{2a}

Physical State: Liquid (sterile filtered)

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Antibody Concentration: 1.38 mg/ml (by UV absorbance at 280 nm)

Buffer: 0.02M Potassium Phosphate, 0.15M Sodium Chloride, pH 7.2

Application(s): Monoclonal anti-GFP is designed to detect native GFP and GFP containing recombinant proteins. This antibody can be used to detect GFP by ELISA (sandwich or capture) for the direct binding of antigen. Biotin conjugated monoclonal anti-GFP used in a sandwich ELISA is well-suited to titrate GFP in solution using this antibody in combination with Rockland's polyclonal anti-GFP (600-101-215), using either form of the antibody as the capture or detection antibodies. Only use the monoclonal form for the detection of wild type or recombinant GFP as this form does not sufficiently detect 'enhanced' GFP. Polyclonal anti-GFP detects all variants of GFP tested to date. The detection antibody is typically conjugated to biotin and subsequently reacted with streptavidin conjugated HRP (code # S000-03). While not yet tested, this antibody will likely detect GFP and GFP containing proteins by immunofluorescence microscopy, with properties similar to its companion polyclonal antibody. The use of polyclonal anti-GFP results in significant amplification of signal when fluorochrome conjugated polyclonal anti-GFP is used, 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. Optimal titers for applications should be determined by the researcher.

Recommended Dilution(s):

ELISA	1:12,000 - 1:60,000
WESTERN BLOT	1:3,000 - 1:15,000
IMMUNOHISTOCHEMISTRY	1:1,000 - 1:5,000
OTHER APPLICATIONS	User Optimized

Storage Conditions: Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening product.

Purity and Specificity: This product was prepared from tissue culture supernatant by Protein A affinity chromatography. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Mouse Serum and purified and partially purified Green Fluorescent Protein (*Aequorea victoria*). Reactivity is observed against wild-type and recombinant forms of GFP. No reaction is seen against RFP.

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

USDA Certification: All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

Note: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.

