

Product Specification Sheet

Product: IRDye™ 800 Conjugated Affinity Purified anti-Green Fluorescent Protein (*Aequorea victoria*) [Goat] Minimum Cross Reactivity to Human, Mouse and Rat Serum Proteins

Code: 600-132-215

Lot # 12778

Size: 0.5 mg

Physical State: Lyophilized

Antibody Concentration: 1.0 mg/ml (by UV absorbance at 280 nm)

Label: IRDye™ 800 (MW 1067)

Fluorochrome/Protein Ratio: 3.2 moles IRDye™ 800 per mole of Goat IgG

Absorption Wavelength: 778 nm

Emission Wavelength: 806 nm

Buffer: 0.02 M Potassium Phosphate, 0.15 M NaCl, pH 7.2

Preservative: 0.01% (w/v) Sodium Azide

Stabilizer: 10 mg/ml Bovine Serum Albumin (BSA) IgG and Protease free

Application(s): Fluorescence technology is widely used to detect proteins. However, many common visible fluorophores often result in considerable background fluorescence in the visible range. Visible fluorophores are rarely used for membrane-based protein detection because of this high background. IRDye™ 800 antibody and reagent conjugates are specifically designed for protein detection methods that use longer-wavelength, near-infrared (IR) fluorophores to visualize proteins in western blotting and other applications. Very low background fluorescence in the IR range provides for a much higher signal-to-noise ratio than visible fluorophores. Detection levels in the picogram range rivals the sensitivity of chemiluminescence on film. IRDye™ 800 conjugates are optimized for the Odyssey® Infrared Imaging System developed by LI-COR. IRDye™ 800 conjugates are also suitable for immunofluorescence microscopy using commercially available excitation/emission filters in the 780nm/820nm range. Dual simultaneous labeling in western blots or microscopy is achieved when IRDye™ 800 conjugates are used in conjunction with Cy5.5™ conjugates. IRDye™ 800 conjugates provide an ultra-sensitive and convenient alternative to standard chemiluminescent protein detection methods, as well as a valuable tool for multicolor imaging.

Recommended Dilution(s): This product was tested by immunoblot using GFP spotted to nitrocellulose membrane. A 1:2,500 dilution is sufficient to detect 25-50 pg of immobilized GFP containing protein. Researchers should determine optimal titers for other applications.

Storage Conditions: Store vial at 4° C prior to restoration. Restore with 0.5 ml of deionized water (or equivalent). 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 date is one (1) year from date of restoration.

Purity: This product 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 and purified and partially purified Green Fluorescent Protein (*Aequorea victoria*) Serum. No reaction was observed against Human, Mouse or Rat serum proteins.

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

Conjugation Reference: LI-COR Biosciences, Lincoln, NE.

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