

Product Specification Sheet**Product:** IRDye™ 700DX Conjugated Affinity Purified anti-Sheep IgG F(c) [Rabbit]**Code:** 613-430-003**Lot #** 14560**Size:** 500 µg**Physical State:** Lyophilized**Antibody Concentration:** 1.0 mg/ml (by UV absorbance at 280 nm)**Label:** IRDye™ 700DX (MW 1954)**Fluorochrome/Protein Ratio:** 2.0 IRDye™ 700DX per mole of Rabbit IgG**Absorption Wavelength:** 689 nm**Emission Wavelength:** 700 nm**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**Stabilizer:** 10 mg/ml BSA IgG and Protease free**Preservative:** 0.01% (w/v) Sodium Azide

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 and IRDye™ 700DX 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 on Western blots rival 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 IRDye™ 700 or Cy5.5™ conjugates. IRDye™ 800 and IRDye™ 700DX 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 Sheep IgG spotted to nitrocellulose membrane. A 1:5,000 dilution is sufficient to detect 12-25 pg of immobilized Sheep IgG. Researchers should determine optimal titers for other targets and cell types.

Storage Conditions: Store vial at 4° C prior to restoration. Restore with 0.5 ml of deionized water (or equivalent). This product is stable for several weeks at 4° C as an undiluted liquid. 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. 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 Sheep IgG 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-Rabbit Serum, Sheep IgG, Sheep IgG F(c) and Sheep Serum. No reaction was observed against Sheep IgG F(ab)₂.

Immunogen: Sheep IgG F(c) fragment**Conjugation Reference:** LI-COR Biosciences, Lincoln, NE.

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.

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