

Product Specification Sheet

Product: IRDye™ 700DX Conjugated Affinity Purified anti-Rat IgG [H&L] [Rabbit] Min X Reactivity to Human Serum Proteins

Code: 612-430-026

Lot # 14558

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: 2.4 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 Rat IgG spotted to nitrocellulose membrane. A 1:5,000 dilution is sufficient to detect 12-25 pg of immobilized Rat 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 Rat 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, Rat IgG and Rat Serum. No reaction was observed against Human Serum Proteins.

Immunogen: Rat IgG, whole molecule

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.

Note: This material is subject to proprietary rights and is sold under license from LI-COR, Inc. This product is licensed for sale only for 'research-use' only. There is no implied license hereunder for any commercial use. IRDye is a trademark of LI-COR, Inc. COMMERCIAL USE shall include:

1. Resale, lease, license or other transfer of the material or any material derived or produced from it.
2. Resale, lease, license or other grant of rights to use this material or any material derived or produced from it.
3. Use of this material to perform services for a fee for third parties.

If you require a commercial license to use this material and do not have one, return this material, unopened to Rockland Inc. PO BOX 326, Gilbertsville, PA and money paid for the material will be refunded.