

#### Datasheet for 209-4234

# **Transferrin Antibody Fluorescein Conjugated**

### **Overview**

| Description:  | Anti-Human Transferrin (RABBIT) Antibody Fluorescein Conjugated (BULK ORDER) - 209-4234 |
|---------------|---|
| Item No.:     | 209-4234  |
| Size:         | 20 mg   |
| Applications: | Dot Blot, WB  |
| Reactivity:   | Human   |
| Host Species: | Rabbit  |

### **Product Details**

**Background:** Human transferrin is encoded by the TF gene and is an iron-binding blood plasma glycoprotein

that controls the level of free iron in biological fluids. Human transferrin binds iron very tightly but reversibly. Human transferrin is the most important iron pool in mammals. Human transferrin has a molecular weight of around 80 kDa and contains 2 specific high-affinity Fe(III) binding sites. The affinity of Human transferrin for Fe(III) is extremely high but decreases progressively with decreasing pH below neutrality. Human Transferrin also plays a role in the immune system, creating environments low in iron for which many pathogenic bacteria are

unable to thrive.

rabbit anti-Transferrin Antibody Fluorescein Conjugated, Apotransferrin antibody, Beta 1 metal **Synonyms:** 

binding globulin antibody, DKFZp781D0156 antibody, PRO1400 antibody, PRO1557 antibody,

PRO2086 antibody, Serotransferrin precursor antibody, Siderophilin antibody, TF antibody

**Host Species:** Rabbit

Conjugate: Fluorescein (FITC)

**Clonality:** Polyclonal

Format: **IgG** 

F/P Ratio: 4.5

## **Target Details**

**Gene Name:** TF

Reactivity: Human

www.rockland.com Page 1 of 4



| Immunogen Type:     | Native Protein  |
|---------------------|---|
| Immunogen:          | Transferrin (Human Serum)   |
| Purity/Specificity: | This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-fluorescein, anti-Rabbit Serum and purified and partially purified Transferrin (Human Serum). |
| Relevant Links:     | <ul> <li>NCBI - AAH59367.1</li> <li>UniProtKB - P02787</li> <li>GeneID - 7018</li> </ul>  |

# **Application Details**

| Tested Applications: | Dot Blot, WB   |
|----------------------|--|
| Application Note:    | Anti-Human transferrin Fluorescein has been tested by dot blot and western blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. |
| Assay Dilutions:     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.  |
| ELISA:               | 1:10,000 - 1:20,000  |
| FLISA:               | User Optimized   |
| IF:                  | User Optimized   |
| WB:                  | User Optimized   |

# **Formulation**

| Physical State:        | Lyophilized  |
|------------------------|--|
| Concentration:         | 10.0 mg/mL by UV absorbance at 280 nm                      |
| Buffer:                | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| Preservative:          | 0.01% (w/v) Sodium Azide                                   |
| Stabilizer:            | 10 mg/ml Polyethylene Glycol (PEG-8000)                    |
| Reconstitution Volume: | 2.0 mL   |
| Reconstitution Buffer: | Restore with deionized water (or equivalent)               |

www.rockland.com Page 2 of 4





## **Shipping & Handling**

| Shipping Condition: | Ambient   |
|---------------------|---|
| Storage Condition:  | Store vial at 4° C prior to restoration. 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:         | Expiration date is one (1) year from date of receipt.   |

### **Images**



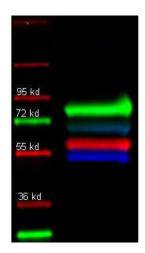
#### **Western Blot**

Rockland Rabbit anti-Transferrin (109-4134 lot 3033, green), Goat-anti-Alpha-1-Anti-Trypsin (100-101-147 lot 5842), and Mouse-a-GST (200-301-200 lot 24882) were used in a multiplex system to detect target proteins under reducing (R) conditions (+4% BME) in albumin depleted human serum with 320 ng of added GST. Sample was run by SDS-PAGE, transferred to 0.2 um PVDF using the BioRad Trans-Blot Turbo and blocked in 2.5% Blotto, 2.5% BSA, 0.02% Tween over night at 4°C. Membrane was probed with three primary antibodies at 1:1000 dilution (in MB-070 over night at 4°C). Detection shown was using DyLight549 Donkey anti-Rabbit IgG (611-742-127 lot 21100, shown as green) DyLight 488 Donkey anti-Mouse IgG (610-741-124 lot 21095, shown as blue), and DyLight 649 Donkey anti-Goat IgG (605-743-125 lot 20834, shown as red) at 1:10000 (in MB-070 30 min RT). Blots were washed, rinsed in methanol, dried and Images were collected using the BioRad VersaDoc System.

www.rockland.com Page 3 of 4







#### **Western Blot**

Rockland primary and Dylight conjugated secondary antibodies were used to detect: Human transferrin (1° 109-4134, green 2° 611-743-127); Alpha 1 anti trypsin (1° 100-101-147, red 2° 605-742-125); and Human IgG (1° 109-3102, Blue 2° 610-741-124 in a multiplex fluorescent western blot of human serum. Each primary antibody was diluted to 1:1000 in Blocking Buffer for Fluorescent Western Blotting - MB-070 and incubated for 2 hrs at RT. Blot was 3X in TTBS, 1X in TBS and probed with secondary antibodies diluted 1:10000) in MB-070 and incubated ~ 1hr at 4 degrees. After wash 2X in TTBS and 2X in TBS, blot was rinsed 2X in MeOH, dried and imaged using the Biorad VersaDoc4000.

#### Disclaimer

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. 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. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.

www.rockland.com Page 4 of 4