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www.rockland.com
tech@rockland.com
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Datasheet for 009-0234

Human Transferrin Fluorescein

Overview

Description:	Human Transferrin Fluorescein Conjugated - 009-0234
Item No.:	009-0234
Size:	1 mg
Applications:	Dot Blot, IF
Origin:	Human

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.
Synonyms:	Human transferrin fluorescein conjugation, FITC conjugated transferrin
Species of Origin:	Human
Conjugate:	Fluorescein (FITC)
Format:	Transferrin
Type:	Native Protein
F/P Ratio:	3.7

Target Details

Purity/Specificity:	This product was prepared from normal serum by delipidation, selective precipitation and tandem molecular sieve chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Fluorescein, anti-Human Transferrin and anti-Human Serum.
Relevant Links:	• GeneID - 7018 • UniProtKB - Q06AH7

- NCBI - AAB22049.1

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	IF (Based on references)
Application Note:	Human transferrin fluorescein conjugation has been tested in dot blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA), fluorescent western blotting, 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.
IF:	1:500-1:2500

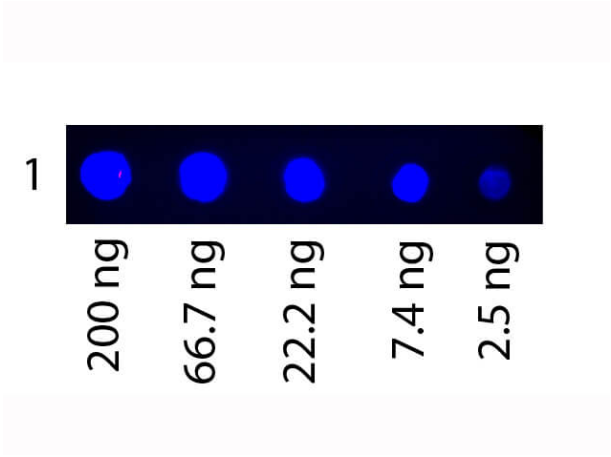
Formulation

Physical State:	Lyophilized
Concentration:	1.0 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 Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

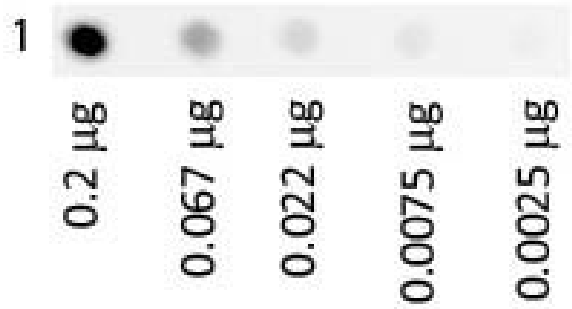
Shipping & Handling

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



Dot Blot
Dot Blot of Fluorescein conjugated Human Transferrin. Antigen: Human Transferrin Fluorescein. Load: 3-fold serial dilution starting at 200 ng. Block: None.



Dot Blot
Dot Blot of Fluorescein conjugated Human Transferrin. Antigen: Human Transferrin Fluorescein. Load: 3-fold serial dilution starting at 200 ng. Block: MB-070 for 30 min at RT.

References

- Zhu H et al. CCT3 drives Sorafenib resistance by inhibiti. *bioRxiv* (2023)
- Offeddu GS et al. Microphysiological endothelial models to characterize subcutaneous drug absorption. *ALTEX.* (2022)
- Schurmann L et al. Inhibition of the DSB repair protein RAD51 potentiates the cytotoxic efficacy of doxorubicin via promoting apoptosis-related death pathways. *Cancer Lett.* (2021)
- Wang-Eckhardt L. et al. A progesterone receptor membrane component 1 antagonist induces large vesicles independent of progesterone receptor membrane component 1 expression. *Biological Chemistry.* (2020)

Disclaimer

No test method can provide total assurance that the hepatitis B virus, hepatitis C virus, human immunodeficiency virus, or any other infectious agents are absent. Thus, all blood products, including purified proteins derived from human blood sources, should be handled at Biosafety Level 2 as recommended by the CDC\NIH manual entitled Biosafety in Microbiological and Biomedical Laboratories for potentially infectious human serum, blood specimens or proteins derived from same. Source material for the human blood product supplied to your facility has been tested for the detection of HIV antibody, Hepatitis B surface antigen, antibody to Hepatitis C, HIV 1 antigen(s), antibody to HTLV - I/II, and syphilis by FDA guidelines. All units were found to be non-reactive/negative for these tests. All human blood source material is collected in FDA licensed centers and is tested with FDA approved test kits.

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