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Datasheet for 600-401-MG1S

SLC40A1 Antibody

Overview

Description:	Anti-SLC40A1 (RABBIT) Antibody - 600-401-MG1S
Item No.:	600-401-MG1S
Size:	25 µL
Applications:	ELISA, IF, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	SLC40A1 (Solute Carrier Family 40 Member 1) may be involved in iron export from duodenal epithelial cell and in transfer of iron between maternal and fetal circulation. Mediates iron efflux in the presence of a ferroxidase (hephaestin and/or ceruloplasmin). Defects in this gene are a cause of hemochromatosis type 4 (HFE4). Diseases associated with SLC40A1 include Hemochromatosis Type 4 and Type 1. Anti-SLC40A1 Antibody is useful for researchers interested in mineral absorption, insulin receptor recycling, and transmembrane transporter activity.
Synonyms:	Rabbit Anti-SLC40A1 Antibody, Solute Carrier Family 40 Member 1, Solute Carrier Family 11 (Proton-Coupled Divalent Metal Ion Transporters), Member 3, Solute Carrier Family 40 (Iron-Regulated Transporter), Member 1, SLC11A3, IREG1, FPN1, Iron-Regulated Transporter 1, Iron Regulated Gene 1, Ferroportin-1, Ferroportin 1, MSTP079, MST079, HFE4, MTP1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SLC40A1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-SLC40A1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal portion of human SLC40A1 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against human SLC40A1. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to mouse and rat.
Relevant Links:	• UniProtKB - Q9NP59 • NCBI - NP_055400.1 • GeneID - 30061

Application Details

Tested Applications:	ELISA, IF, WB
Application Note:	Anti-SLC40A1 Antibody has been tested in ELISA, WB, and IF. Expect a band at ~62.5kDa in western blot using appropriate lysates. Positive control used: Caco-2 lysate in Western Blot and Hep-G2 in Immunofluorescence.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IF:	15 µg/ml
WB:	10 µg/ml

Formulation

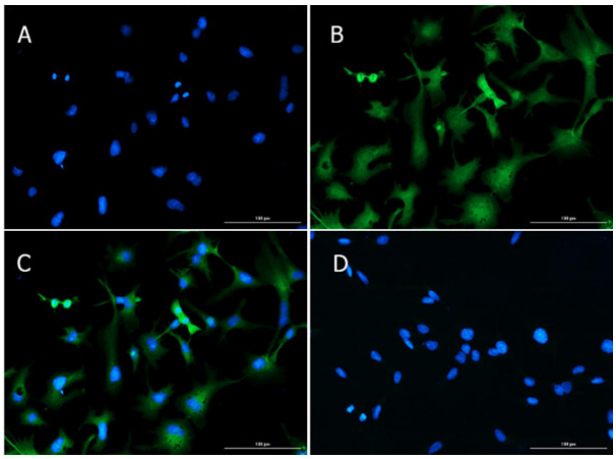
Physical State:	Liquid (sterile filtered)
Concentration:	1.04 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

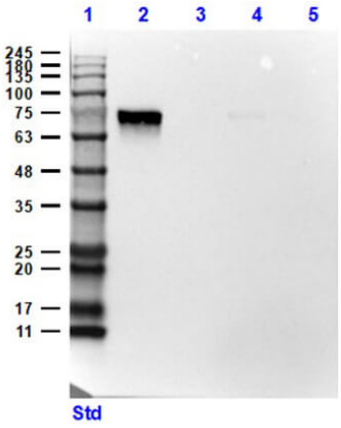
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

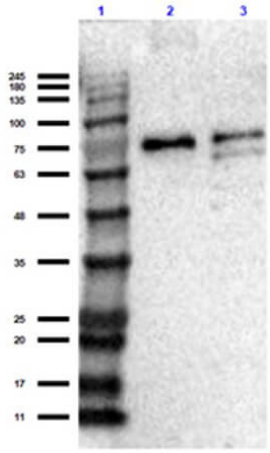
Images



Immunofluorescence Microscopy
Immunofluorescence of Rabbit Anti-SLC40A1 Antibody. Cells: Hep-G2 Cells. Fixative: 4% PFA. Permeabilization: 0.3% Triton X-100. Primary Antibody: Anti-SLC40A1 at 15µg/mL overnight at 2-8°C. Counterstain: Donkey Anti-Rabbit IgG DyLight™488 (p/n 611-741-127) at 5µg/mL for 1hr at RT. Nuclear Counterstain: DAPI. Staining: (A) DAPI. (B) Anti-SLC40A1 + DyLight™488. (C) Merge A + B. (D) secondary only. Expected Localization: cytoplasm/plasma.



Western Blot
Western Blot of Rabbit Anti-SLC40A1 Antibody. Lane 1: Opal Pre-stained molecular weight (p/n MB-210-0500). Lane 2: Caco-2 Lysate (p/n W09-001-GX4). Lane 3: K-562 Lysate (p/n W09-001-GJ7). Lane 4: Hep-G2 Lysate (p/n W09-001-GJ5). Lane 5: MCF-7 Lysate (p/n W09-000-360) [-]. Primary Antibody: Anti-SLC40A1 at 5µg/mL overnight at 2-8°C. Secondary Antibody: Goat anti-Rabbit IgG HRP (p/n 611-103-122) at 1:70,000 for 1 hr at RT. Blocking Buffer: Universal BlockOut Buffer (p/n MB-073). Predicted MW: ~63kDa. Observed MW: ~75kDa. Exposure time: 40 seconds.



Western Blot

Western Blot of Rabbit Anti-SLC40A1 Antibody. Lane 1: Opal Pre-stained molecular weight (p/n MB-210-0500). Lane 2: SLC40A1 overexpressing HEK293T Lysate (10µg). Lane 3: HEK293T empty vector Lysate (10µg). Primary Antibody: Anti-SLC40A1 at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat anti-Rabbit IgG HRP (p/n 611-103-122) at 1:70,000 for 1 hr at RT. Blocking Buffer: Universal BlockOut Buffer (p/n MB-073). Predicted MW: ~70kDa for overexpressed. Observed MW: ~75kDa. Exposure time: 38 seconds.

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