

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Ferroportin/SLC40A1 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1308C
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Synthetic peptide containing human Ferroportin/SLC40A1 Accession # Q9NP59
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	HEK293 Human Cell Line Transfected with Human Ferroportin/SLC40A1 and eGFP

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Ferroportin-1 (FPN1), also known as solute carrier family 40 member 1 (SLC40A1) or iron-regulated transporter 1 (IREG1), is a multi-pass membrane protein that in humans is encoded by the SLC40A1 gene and is part of the Ferroportin (Fpn) Family. Ferroportin 1 is an iron-regulated transporter that is essential for iron homeostasis, playing a key role in intestinal iron absorption, as well as cellular iron release and efflux. Ferroportin can be regulated at many different levels including transcriptionally, post-transcriptionally, through mRNA stability and post-translationally, through protein turnover. Mutations affecting the SLC40A1 gene result in a disorder of iron metabolism characterized by iron overload. Excess iron is deposited in a variety of organs leading to their failure, and resulting in serious illnesses including cirrhosis, hepatomas, diabetes, cardiomyopathy and arthritis.

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