

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Ferroportin/SLC40A1 in direct ELISAs.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 1308C
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Synthetic peptide containing human Ferroportin/SLC40A1 Accession # Q9NP59
<b>Conjugate</b>	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
<b>Formulation</b>	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
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	HEK293 Human Cell Line Transfected with Human Ferroportin/SLC40A1 and eGFP

## PREPARATION AND STORAGE

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

## 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.

## PRODUCT SPECIFIC NOTICES

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