abcam

Product datasheet

Anti-NRAMP1 antibody ab58138

3 Images

Overview

Product name	Anti-NRAMP1 antibody
Description	Mouse monoclonal to NRAMP1
Host species	Mouse
Tested applications	**Suitable for:** WB, ICC/IF, Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment: QAFYQKTNQA AFNICANSSL HDYAKIFPMN NATVAVDIYQ GGV, corresponding to amino acids 308-351 of Human NRAMP1 Run BLAST with ExPASy Run BLAST with NCBI
Positive control	This antibody gave a positive result when used in the following methanol fixed cell lines: A549

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: None PBS, pH 7.2
Purity	Protein G purified
Clonality	Monoclonal
Isotype	IgG1
Light chain type	kappa

Applications

Our Abpromise guarantee covers the use of **ab58138** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

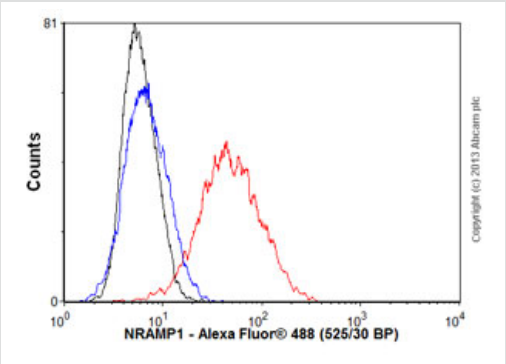
Application	Abreviews	Notes

Application	Abreviews	Notes
WB		Use a concentration of 1 - 5 µg/ml. This antibody has only been tested in WB against the recombinant fragment used as immunogen. We have no data on the detection of endogenous protein.
ICC/IF		Use a concentration of 5 µg/ml.
Flow Cyt		Use 0.1µg for 10^6 cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

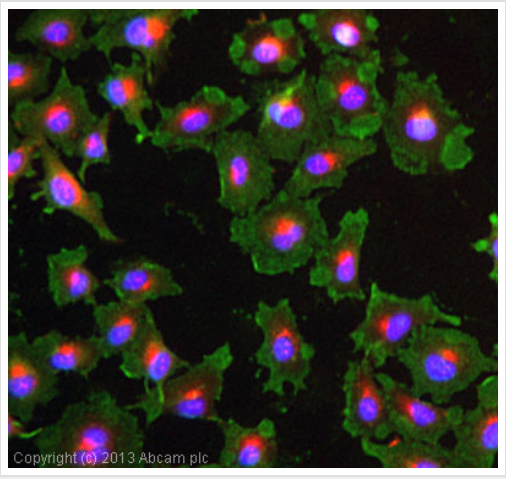
Function	Divalent transition metal (iron and manganese) transporter involved in iron metabolism and host resistance to certain pathogens. Macrophage-specific membrane transport function. Controls natural resistance to infection with intracellular parasites. Pathogen resistance involves sequestration of Fe(2+) and Mn(2+), cofactors of both prokaryotic and eukaryotic catalases and superoxide dismutases, not only to protect the macrophage against its own generation of reactive oxygen species, but to deny the cations to the pathogen for synthesis of its protective enzymes.
Tissue specificity	Macrophages; peripheral blood leukocytes, lung, spleen and liver.
Sequence similarities	Belongs to the NRAMP family.
Cellular localization	Membrane.

Images



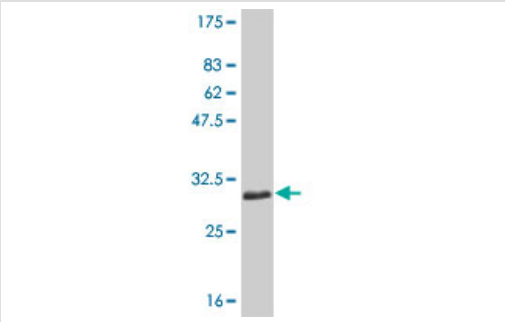
Flow Cytometry - Anti-NRAMP1 antibody (ab58138)

Overlay histogram showing HepG2 cells stained with ab58138 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab58138, 0.1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was an anti-mouse Alexa Fluor® 488 (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunocytochemistry/ Immunofluorescence - Anti-NRAMP1 antibody (ab58138)

ICC/IF image of ab58138 stained A549 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab58138 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- mouse (ab96879) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Anti-NRAMP1 antibody (ab58138)

Western blot against tagged recombinant protein immunogen using ab58138 NRAMP1 antibody at 1ug/ml. Predicted band size of immunogen is 31 kDa

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors