

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DARC. Stains human DARC transfected cells but not irrelevant transfectants.
Source	Monoclonal Mouse IgG _{2A} Clone # 358307
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	HEK293 human embryonic kidney cell line transfected with human DARC Met1-Ser336 Accession # Q16570
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

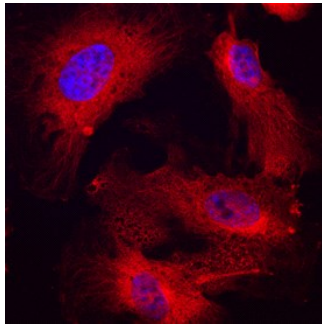
APPLICATIONS

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 µg/10 ⁶ cells	Human blood erythrocytes
Immunocytochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Immunocytochemistry



DARC in Human HUVEC. DARC was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Mouse Anti-Human DARC Monoclonal Antibody (Catalog # MAB4139) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cell membranes. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Duffy Antigen Receptor for Chemokines (DARC), also known as Fy glycoprotein and CD234, is a 7TM non-signaling chemokine receptor that is expressed on venular endothelial cells and erythrocytes. DARC binds and mediates the internalization of several inflammatory CC and CXC chemokines. It transports chemokines to the luminal face of venular endothelium to promote the extravasation of leukocytes to sites of inflammation. DARC polymorphisms are important in blood transfusion compatibility and determine the susceptibility of erythrocytes to *Plasmodium vivax* infection. Human DARC shares 60% amino acid sequence identity with mouse DARC.