

DARC Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20261a**Specification**

DARC Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q16570
Other Accession	NP_002027.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35553
Antigen Region	1-30

DARC Antibody (N-term) - Additional Information**Gene ID** 2532**Other Names**

Atypical chemokine receptor 1, Duffy antigen/chemokine receptor, Fy glycoprotein, GpFy, Glycoprotein D, Plasmodium vivax receptor, CD234, ACKR1, DARC, FY, GPD

Target/Specificity

This DARC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human DARC.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DARC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DARC Antibody (N-term) - Protein Information**Name** ACKR1**Synonyms** DARC, FY, GPD

Function Atypical chemokine receptor that controls chemokine levels and localization via high-affinity chemokine binding that is uncoupled from classic ligand-driven signal transduction cascades, resulting instead in chemokine sequestration, degradation, or transcytosis. Also known as interceptor (internalizing receptor) or chemokine-scavenging receptor or chemokine decoy receptor. Has a promiscuous chemokine-binding profile, interacting with inflammatory chemokines of both the CXC and the CC subfamilies but not with homeostatic chemokines. Acts as a receptor for chemokines including CCL2, CCL5, CCL7, CCL11, CCL13, CCL14, CCL17, CXCL5, CXCL6, IL8/CXCL8, CXCL11, GRO, RANTES, MCP-1, TARC and also for the malaria parasites *P.vivax* and *P.knowlesi*. May regulate chemokine bioavailability and, consequently, leukocyte recruitment through two distinct mechanisms: when expressed in endothelial cells, it sustains the abluminal to luminal transcytosis of tissue-derived chemokines and their subsequent presentation to circulating leukocytes; when expressed in erythrocytes, serves as blood reservoir of cognate chemokines but also as a chemokine sink, buffering potential surges in plasma chemokine levels.

Cellular Location

Early endosome. Recycling endosome. Membrane; Multi-pass membrane protein.
Note=Predominantly localizes to endocytic vesicles, and upon stimulation by the ligand is internalized via caveolae. Once internalized, the ligand dissociates from the receptor, and is targeted to degradation while the receptor is recycled back to the cell membrane

Tissue Location

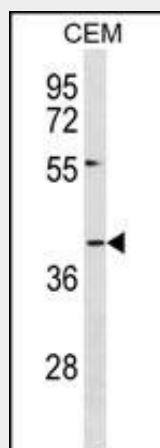
Found in adult kidney, adult spleen, bone marrow and fetal liver. In particular, it is expressed along postcapillary venules throughout the body, except in the adult liver. Erythroid cells and postcapillary venule endothelium are the principle tissues expressing duffy. *Fy(-A-B)* individuals do not express duffy in the bone marrow, however they do, in postcapillary venule endothelium

DARC Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DARC Antibody (N-term) - Images



DARC Antibody (N-term) (Cat. #AP20261a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the DARC antibody detected the DARC protein (arrow).

DARC Antibody (N-term) - Background

The protein encoded by this gene is a glycosylated membrane protein and a non-specific receptor for several chemokines. The encoded protein is the receptor for the human malarial parasites *Plasmodium vivax* and *Plasmodium knowlesi*. Polymorphisms in this gene are the basis of the Duffy blood group system. Two transcript variants encoding different isoforms have been found for this gene.

DARC Antibody (N-term) - References

Silva, L.K., et al. Eur. J. Hum. Genet. 18(11):1221-1227(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Le Goff, G.C., et al. Anal. Chem. 82(14):6185-6192(2010)
Di Cristofaro, J., et al. J Mol Diagn 12(4):453-460(2010)
Maestre, A., et al. PLoS ONE 5 (7), E11437 (2010) :