

ACKR1 Antibody (C-Terminus) Rabbit Polyclonal Antibody Catalog # ALS12212

## Specification

# ACKR1 Antibody (C-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>Q16570</u> Human, Mouse, Rat Rabbit Polyclonal 36kDa KDa

## ACKR1 Antibody (C-Terminus) - 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** 16 amino acid peptide from near the carboxy terminus of human DARC.

**Reconstitution & Storage** Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

**Precautions** ACKR1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

## ACKR1 Antibody (C-Terminus) - 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**

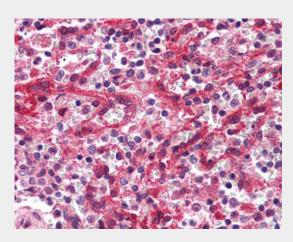
Found in adult kidney, adult spleen, bone marrow and fetal liver. In particular, it is expressed along postcapillary venules throughout the body, except in the adult liver. Erythroid cells and postcapillary venule endothelium are the principle tissues expressing duffy. Fy(-A-B) individuals do not express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

## ACKR1 Antibody (C-Terminus) - Protocols

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

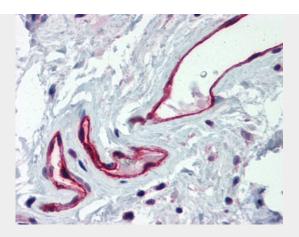
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## ACKR1 Antibody (C-Terminus) - Images



Anti-DARC antibody IHC of human spleen, red pulp.





Anti-DARC antibody IHC of human colon, vessels. ACKR1 Antibody (C-Terminus) - Background

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# ACKR1 Antibody (C-Terminus) - References

Chaudhuri A., et al. Proc. Natl. Acad. Sci. U.S.A. 90:10793-10797(1993). Tournamille C., et al.Nat. Genet. 10:224-228(1995). Iwamoto S., et al.Blood 85:622-626(1995). Tournamille C., et al.Blood 92:2147-2156(1998). Olsson M.L., et al.Br. J. Haematol. 103:1184-1191(1998).