

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

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**ACKR1 Antibody (C-Terminus) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q16570</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	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**

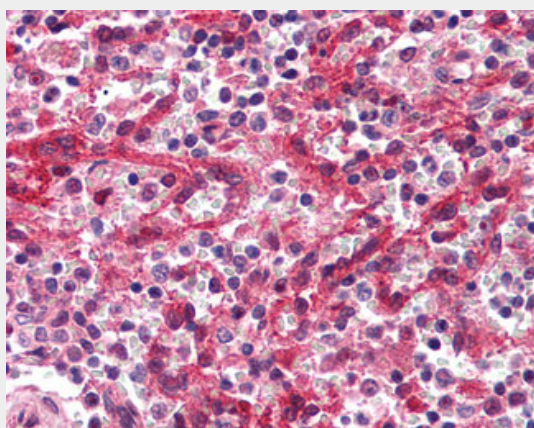
Found in adult kidney, adult spleen, bone marrow and fetal liver. In particular, it is expressed along postcapillary venules throughout the body, except in the adult liver. Erythroid cells and postcapillary venule endothelium are the principle tissues expressing duffy. Fy(-A-B) individuals do not express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

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

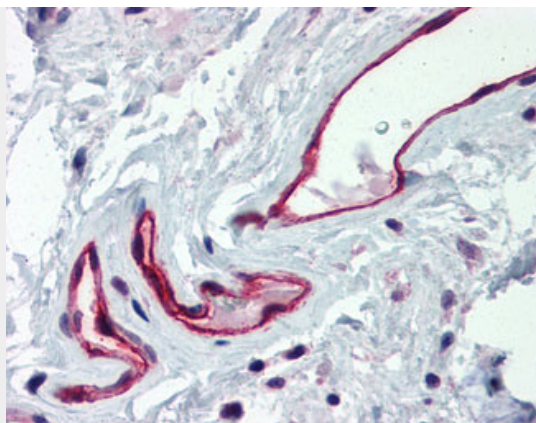
Provided below are standard protocols that you may find useful for product applications.

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

### **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).