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Anti-CD234 Antibody

Catalog # AP51154

Product Information

Application	WB, IF/IC
Primary Accession	Q16570
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35553

Additional Information

Gene ID	2532
Other Names	ACKR1; FY; GPD; Duffy antigen/chemokine receptor; Atypical chemokine receptor 1; Fy glycoprotein; GpFy; Glycoprotein D; Plasmodium vivax receptor; CD234
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human CD234. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

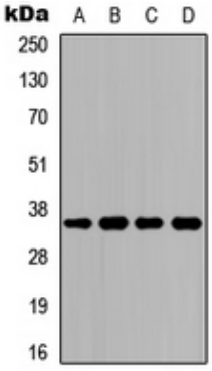
Name	ACKR1
Function	Atypical chemokine receptor that controls chemokine levels and localization via high-affinity chemokine binding that is uncoupled from classic ligand-driven signal transduction cascades, resulting instead in chemokine sequestration, degradation, or transcytosis. Also known as interceptor (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 and TARC. 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. (Microbial infection) Acts as a receptor for the malaria parasite Plasmodium knowlesi.
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

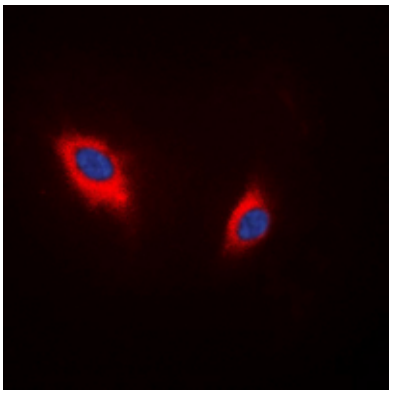
References

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).

Images



Western blot analysis of CD234 expression in HeLa (A), K562 (B), Raw264.7 (C), PC12 (D) whole cell lysates. (Predicted band size: 35 kD; Observed band size: 35 kD)



Immunofluorescent analysis of CD234 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.