

CD234 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51154

Specification

CD234 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, ICC, E <u>O16570</u> Human, Mouse, Rat Rabbit Polyclonal 36 KDa

CD234 Antibody - 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

Dilution WB~~1:1000 ICC~~N/A E~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

CD234 Antibody - 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

CD234 Antibody - Protocols

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

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

CD234 Antibody - Images

CD234 Antibody - Background

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CD234 Antibody - 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).