

Anti-Duffy antibody



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| Description | Rabbit polyclonal to Duffy. |
| Model | STJ92785 |
| Host | Rabbit |
| Reactivity | Human |
| Applications | ELISA, IF |
| Immunogen | Synthesized peptide derived from human Duffy |
| Immunogen Region | 10-90 aa, N-terminal |
| Gene ID | 2532 |
| Gene Symbol | ACKR1 |
| Dilution range | IF 1:200-1:1000ELISA 1:40000 |
| Specificity | Duffy Polyclonal Antibody detects endogenous levels of Duffy protein. |
| Tissue Specificity | 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. |
| Purification | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Note | For Research Use Only (RUO). |
| Protein Name | Atypical chemokine receptor 1 Duffy antigen/chemokine receptor Fy glycoprotein GpFy Glycoprotein D Plasmodium vivax receptor CD antigen |

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| | CD234 |
| Molecular Weight | 35.553 kDa |
| Clonality | Polyclonal |
| Conjugation | Unconjugated |
| Isotype | IgG |
| Formulation | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| Concentration | 1 mg/ml |
| Storage Instruction | Store at -20°C, and avoid repeat freeze-thaw cycles. |
| Database Links | HGNC:4035OMIM:110700 |
| Alternative Names | Atypical chemokine receptor 1 Duffy antigen/chemokine receptor Fy glycoprotein GpFy Glycoprotein D Plasmodium vivax receptor CD antigen CD234 |
| 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 Localization | Early endosome. Recycling endosome. Membrane. Multi-pass membrane protein. 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. |