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**Table listing opsonic and non-opsonic receptors found on various phagocytic cells in humans***

| 1. | Opsonic Receptors | Ligand | Receptor Expression profile(human) | Other Remarks | Ref |
|---|---|---|---|---|---|
| **1.1** | **Fc receptors (FcRs)** | | | | [1] |
| | FcγRI (CD64) | IgG1, IgG3, IgG4 | monocytes, macrophages, dendritic cells (DCs), inducible expression in neutrophils and mast cells | Signalling: Immunoreceptor tyrosine-based activation motif (ITAM) Pathway | [2,3] |
| | FcγRIIA (CD32) | IgG1, IgG2, IgG3, IgG4 | Neutrophils, monocytes, macrophage, dendritic cells, mast cells, eosinophils, basophils | Signalling: ITAM Pathway | [2] |
| | FcγRIIC (CD32) | IgG1, IgG2, IgG3, IgG4 | Monocytes, neutrophils, CD19+ B cells, NK cells (expression subject to polymorphism) | | |
| | FcγRIIIA | IgG1, IgG2, IgG3, IgG4 | Monocytes, macrophages, NK cells | | [2] |
| | FcγRIIIB | IgG1, IgG3, IgG4 | Neutrophils, basophils | | |
| | FcεRI | IgE | Mast cells, Basophils | | [4] |
| | FcαRI (CD89) | IgA1, IgA2 | Eosinophils, neutrophils | | [3] |
| | | | | | |
| **1.2** | **Complement receptors (CRs)** | | | | [5] |
| | CRIg | C3b, iC3b and C3c | Kupffer cells, subset of tissue resident macrophages | | [6,7] |
| | CR-1 (CD35) | C3b, soluble C1q, C4b | Neutrophils, monocytes, macrophages, B cells, a subpopulation of T cells, erythrocytes, eosinophils, basophils, follicular dendritic cells, Langerhans cells | | [8,9] |

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| | | | | | |
|---|---|---|---|---|---|
| | CR-2 (CD21) | C3dg, iC3b, Epstein Bar Virus | B cells, follicular DCs, peripheral and thymic T cells | | [10] |
| | CR-3 (CDllb/CD18) | iC3b, β-glucan and ICAM-1, C3dg | Monocytes, macrophages, neutrophils, NK cells, dendritic cells, eosinophils, basophils, platelets and activated T and B lymphocytes | | [11–13] |
| | CR-4 (p150/95, CD11c/CD18, αx/β2, ITGAX/ITGB2) | iC3b, ICAM-1, Fibrinogen, VCAM-1 | Monocytes, macrophages, neutrophils, NK cells, dendritic cells, eosinophils, basophils, platelets and activated T and B lymphocytes | | [14] |
| | cC1qR (calreticulin) | C1q and MBL | Monocytes, macrophages, dendritic cells, neutrophils, mast cells, basophils, B cells | | [15] |
| **2.** | **Non-opsonic receptors** | **Ligand** | | | |
| **2.1** | **C-type Lectin Receptors (CLRs)** | | | | |
| | ***Type I*** | | | | |
| | DEC-205 | CpG oligonucleotides, Apoptotic cells | Dendritic cells, B cells, T cells | | [16–18] |
| | Macrophage Mannose Receptor (MMR) | terminal mannose, N-acetylglucosamine and fucose residues on glycans | Tissue macrophages, dendritic cells | | [19] |
| | ***Type II*** | | | | |
| | Dectin-I | β-glucans | Monocytes, macrophages, neutrophils, dendritic cells, T cells, B cells (function unknown) | hemITAM-based | [20–22] |

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| | | | | | |
|---|---|---|---|---|---|
| | Dectin-II | α-mannans | Monocytes, macrophages, dendritic cells, Langerhans cells | | 23,24 |
| | Macrophage-Inducible C-type lectin (Mincle) | Glycolipids such as mycobacterial cord factor and trehalose-6,6'-dimycolate (TDM) | Macrophages, neutrophils, dendritic cells and B cells | | 25–27 |
| | dendritic cell-specific ICAM3-grabbing nonintegrin (DC-SIGN) | Mannose, ICAM-3 | Macrophages and dendritic cells | | 28 |
| | (DC NK lectin group receptor-1) DNGR-I | F-actin (exposed during necrosis) | Type 1 conventional dendritic cells (cDC1s) | | 29,30 |
| | | | | | |
| **2.2** | **Scavenger Receptors (SRs)** | | | | |
| | SR-A1 | β-amyloid, heat shock proteins, LPS of gram-positive and LTA of gram-negative bacteria, bacterial CpG DNA, hepatitis C virus, acetylated LDL, oxidized LDL, fucoidan | macrophages, monocytes, mast cells, and dendritic cells | binding to apoptotic bodies promotes phagocytosis and clearance | 31 |
| | SR-A1.1 (alternatively spliced form of SR-A1) | Polyanionic ligands | | | |
| | SR-A3 (MSLR-1/APC-7) | | epithelial cells epithelial cells within the testis, airway, thymus, and the adrenal gland, and cells of the placenta, lungs, heart, and small intestine | Protects cells against reactive oxygen species by binding and internalizing oxidative molecules | 32,33 |
| | SR-A4 (SRCL/CL-P1) | Lipoproteins | epithelial cells within the testis, airway, thymus, and the adrenal gland, , and cells | mediates the recognition, internalization, and degradation of | 34,35 |

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| | | | of the placenta, lungs, heart, and small intestine | oxidatively modified LDL by vascular endothelial cells | |
| | SR-A5 (TESR) | Gram positive and gram negative bacteria | epithelial cells within the testis, airway, thymus, and the adrenal gland, and cells of the placenta, lungs, heart, and small intestine | Binds bacteria | [36] |
| | SR-A6 (MARCO) | Polyanionic ligands including nucleic acids, LPS of gram-positive and LTA of gram-negative bacteria , CpG DNA, oxidized and acetylated LDL, environmental particles | Macrophages in the lymph nodes and marginal zone of the spleen | Clear bacteria from bloodstream and lungs | [37,38] |
| | SRCL-I/II (collectin) | Asialoglycoproteins, oxidized LDLs, gram-negative bacteria | Endothelial cells of human umbilical veins and arteries, vascular endothelial cells of heart | Contains carbohydrate recognition domain | [39,40] |
| | SR-BI | Acetylated LDL, oxidized LDL, viruses (hepatitis C virus capsid) and bacteria, collagen | monocytes, macrophages and dendritic cells, and is also found on hepatocytes, steroidogenic tissue and adrenal glands | binding to apoptotic bodies promotes phagocytosis and clearance | [41] |
| | CD-36 | binds erythrocytes infected with the malaria parasite, collagen, PfEMP1 protein of *Plasmodium falciparum*, polyanionic ligands such as hLDL, phosphatidylinositol , phosphatidylserine, thrombospondin-1 ,fungi and bacteria, apoptotic cells, amyloid proteins | Platelets, monocytes, macrophages, adipocytes, epithelial cells in the breasts and eye, insulin responsive cells | Plays a role in regulating the host malarial response , promote foam cell formation, platelet activation/aggregation, apoptosis, angiogenesis, inflammation | [41,42] |

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| | | | | | |
|---|---|---|---|---|---|
| | LIMP-2 | Phospholipids, enterovirus 71 and coxsackieviruses | Localized in the late endosomes of plasmacytoid dendritic cells (pDCs), macrophages | | 43 |
| | | | | | |
| | SR-D1 (CD-68) | Oxidized LDL, polyanionic ligands, lectins, selectins apoptotic cells | late endosomal compartment in Monocytes and tissue macrophages, dendritic cells, osteoclasts | differentiation marker of hematopoietic cells of the monocyte/macrophage lineage. | 44,45 |
| | SR-E1 (LOX-1) | OxLDL, phosphatidylserine, PAMPs from gram negative and gram positive bacteria | Dendritic cells, macrophages, platelets, vascular endothelial cells, adipocytes | linked to apoptosis in the endothelium, VSMCs, macrophages, epithelial cells and neurons. | 46,47 |
| | SR-E2 | Protein is currently known as dectin-1 (mentioned above) | | | |
| | SR-E3 (CD206) (currently known as mannose receptor 1, CD206) | mannosylated protein antigens, glycans on surface of pathogens | Immature dendritic cells, | SR-E3 is a differentiation marker of immature monocyte-derived dendritic cells | 48,49 |
| | SR-E4 (currently known as ASGPR1) | | | | |
| | SR-F1 | carbamylated LDL (cLDL), AcLDL or OxLDL, Fungal pathogens, heat shock protein 90 | neuronal and endothelial cells in heart, lung, ovary and placenta; | Involved in clearance of apoptotic cells | 50 |
| | SR-F2 | C1q, fungal pathogens, heat shock proteins and apoptotic cells. | | lacks SR activity but preferentially forms heterodimers with SR-F1 ,clearance of | 51 |

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| | | | | | |
|---|---|---|---|---|---|
| | | | | apoptotic cells b binding to C1q protein | |
| | SR-G1 (CXCL16) | OxLDL, phosphatidylserine, bacteria and CpG-rich DNA | vascular smooth muscle cells, endothelial cells, monocytes, macrophages, kidney podocytes and in atherosclerotic lesions | Only receptor with a chemokine activity. Mice lacking SR-G produced lowered cytokines and liver natural killer cells | [52,53] |
| | SR-H1(FEEL-1) and SR-H2 (FEEL-2) | AcLDL, advanced glycation end-products (AGE) and bacteria | macrophages, mononuclear cells, hematopoietic stem cells, and endothelial cells | Involved in clearance of aged RBC's and apoptotic cells | [54] |
| | SR-I1 | clearance of plasma hemoglobin, Gram-negative and Gram-positive bacteria, | monocytes and macrophages | also known as "hemoglobin scavenger receptor" because of its role in mediating Hb recognition and clearance in tissue macrophages | [55–57] |
| | SR-J1 | advanced glycation end products, high mobility group protein box-1 (HMGB1), S-100 protein, β-amyloid, S100/calgranulin, phosphatidylserine | endothelial cells, hepatocytes, smooth muscle cells and monocytes | The receptor belongs to a class of immunoglobulin superfamily. Involved in recognition of molecules released during chronic inflammation/infection | [58,59] |

The above information has been compiled using these references. [60–63]

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