

TABLE 372e-7 CYTOKINES AND CYTOKINE RECEPTORS (CONTINUED)

Cytokine	Receptor	Cell Source	Cell Target	Biologic Activity
MCP-3	CCR1, CCR2	Fibroblasts, activated PBMCs	Monocytes-macrophages, T cells, eosinophils, basophils, NK cells, dendritic cells	Chemoattractant for monocytes, memory and naïve T cells, dendritic cells, eosinophils, ?NK cells; activates basophils and eosinophils; regulates monocyte protease production
MCP-4	CCR2, CCR3	Lung, colon, small intestinal epithelial cells, activated endothelial cells	Monocytes-macrophages, T cells, eosinophils, basophils	Chemoattractant for monocytes, T cells, eosinophils, and basophils
Eotaxin	CCR3	Pulmonary epithelial cells, heart	Eosinophils, basophils	Potent chemoattractant for eosinophils and basophils; induces allergic airways disease; acts in concert with IL-5 to activate eosinophils; antibodies to eotaxin inhibit airway inflammation
TARC	CCR4	Thymus, dendritic cells, activated T cells	T cells, NK cells	Chemoattractant for T and NK cells
MDC	CCR4	Monocytes-macrophages, dendritic cells, thymus	Activated T cells	Chemoattractant for activated T cells; inhibits infection with T cell tropic HIV
MIP-1 α	CCR1, CCR5	Monocytes-macrophages, T cells	Monocytes-macrophages, T cells, dendritic cells, NK cells, eosinophils, basophils	Chemoattractant for monocytes, T cells, dendritic cells, and NK cells, and weak chemoattractant for eosinophils and basophils; activates NK cell function; suppresses proliferation of hematopoietic precursors; necessary for myocarditis associated with coxsackievirus infection; inhibits infection with monocyotropic HIV
MIP-1 β	CCR5	Monocytes-macrophages, T cells	Monocytes-macrophages, T cells, NK cells, dendritic cells	Chemoattractant for monocytes, T cells, and NK cells; activates NK cell function; inhibits infection with monocyotropic HIV
RANTES	CCR1, CCR2, CCR5	Monocytes-macrophages, T cells, fibroblasts, eosinophils	Monocytes-macrophages, T cells, NK cells, dendritic cells, eosinophils, basophils	Chemoattractant for monocytes-macrophages, CD4+, CD45Ro+ T cells, CD8+ T cells, NK cells, eosinophils, and basophils; induces histamine release from basophils; inhibits infections with monocyotropic HIV
LARC/MIP-3 α /Exodus-1	CCR6	Dendritic cells, fetal liver cells, activated T cells	T cells, B cells	Chemoattractant for lymphocytes
ELC/MIP-3 β	CCR7	Thymus, lymph node, appendix	Activated T cells and B cells	Chemoattractant for B and T cells; receptor upregulated on EBV-infected B cells and HSV-infected T cells
I-309/TCA-3	CCR8	Activated T cells	Monocytes-macrophages, T cells	Chemoattractant for monocytes; prevents glucocorticoid-induced apoptosis in some T cell lines
SLC/TCA-4/Exodus-2	CCR7	Thymic epithelial cells, lymph node, appendix, and spleen	T cells	Chemoattractant for T lymphocytes; inhibits hematopoiesis
DC-CK1/PARC	Unknown	Dendritic cells in secondary lymphoid tissues	Naïve T cells	May have a role in induction of immune responses
TECK	CCR9	Dendritic cells, thymus, liver, small intestine	T cells, monocytes-macrophages, dendritic cells	Thymic dendritic cell-derived cytokine, possibly involved in T cell development
GRO- α /MGSa	CXCR2	Activated granulocytes, monocyte-macrophages, and epithelial cells	Neutrophils, epithelial cells, ?endothelial cells	Neutrophil chemoattractant and activator; mitogenic for some melanoma cell lines; suppresses proliferation of hematopoietic precursors; angiogenic activity
GRO- β /MIP-2 α	CXCR2	Activated granulocytes and monocyte-macrophages	Neutrophils and ?endothelial cells	Neutrophil chemoattractant and activator; angiogenic activity
NAP-2	CXCR2	Platelets	Neutrophils, basophils	Derived from platelet basic protein; neutrophil chemoattractant and activator
IP-10	CXCR3	Monocytes-macrophages, T cells, fibroblasts, endothelial cells, epithelial cells	Activated T cells, tumor-infiltrating lymphocytes, ?endothelial cells, ?NK cells	IFN- γ -inducible protein that is a chemoattractant for T cells; suppresses proliferation of hematopoietic precursors
MIG	CXCR3	Monocytes-macrophages, T cells, fibroblasts	Activated T cells, tumor-infiltrating lymphocytes	IFN- γ -inducible protein that is a chemoattractant for T cells; suppresses proliferation of hematopoietic precursors
SDF-1	CXCR4	Fibroblasts	T cells, dendritic cells, ?basophils, ?endothelial cells	Low-potency, high-efficacy T cell chemoattractant; required for B-lymphocyte development; prevents infection of CD4+, CXCR4+ cells by T cell tropic HIV

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