

## A Summary of some Important Cytokines

Cytokine	Representative Activity
Interleukin-1 (IL-1)	Stimulates T <sub>H</sub> cells in presence of antigens; chemically attracts is phagocytes in inflammatory response
Interleukin-2 (IL-2)	Involved in proliferation of antigen-stimulated T <sub>H</sub> cells, proliferation and differentiation B cells, and activation of T <sub>C</sub> cells and NK cells.
Interleukin-12 (IL-12)	Mainly involved in differentiation of CD4-type T cells
Gamma-interferon ( $\gamma$ -IFN)	Inhibits intracellular viral replication; Increases activity of macrophages against microbes and tumor cells.
Tumor necrosis factor-beta (TNF- $\beta$ )	Cytotoxic to tumor cells; enhances activity of phagocytic cells.
Granulocyte-macrophage colony-stimulating factor (GM-CSF)	Stimulates formation of red and white blood cells from stem Cells.