

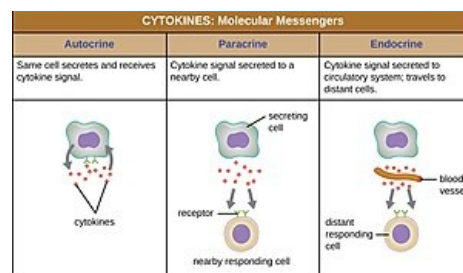
Interleukins

The humoral signaling molecules that cells of the immune system use to communicate with each other are called cytokines. A very important group of cytokines are the **interleukins (ILs)**. These are mostly short peptide chains. Their effects are both **autocrine**, **paracrine** and **endocrine**. They serve as **humoral communication** between specific immunity and natural immunity cells. They are produced mostly by helper T-ly, APCs and macrophages.

Function overview

Interleukins have very different functions. An overview of the most important ones is given in the table.

IL-1	initiates <u>inflammation</u> response (fever), activates other cells
IL-2	activates T-lymphocytes and B-lymphocytes, macrophages, neutrophils
IL-3	promotes proliferation of <i>white blood cells</i> (myeloid and lymphoid progenitor cells) - see <u>CSF</u>
IL-4	T _h 2-ly subset support, plasma cell maturation and <u>antibody class</u> switching
IL-5	promotion of proliferation and differentiation of eosinophils and T-ly
IL-6	systemic inflammatory response (fever), promotion of T-ly, B-ly
IL-7	proliferation and differentiation of lymphoid cells in the thymus
IL-8	chemotactic effects
IL-10	suppression of inflammatory response, promotion of T _h 2-ly subset
IL-12	increasing cytotoxicity (<u>NK cells</u> , T _h 1-ly, macrophages, neutrophils)
IL-13	attenuation of inflammatory reaction, inhibition of cytokine production



Links

Related articles

- [Cytokines](#)
- [Specific immunity](#)
- [Natural immunity](#)
- [Interferons](#)
- [CSF](#)

External links

- ŠTERZL, Ivan, et al. *Základy imunologie*. 1. edition. Praha : Karolinum, 2005. ISBN 80-246-0972-X.