## Allergy-immunology glossary

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Towards a clear designation of some of the terms used in allergology and immunology.

Interleukin-12	Interleukin-12 (IL-12) is a heterodimeric pro-inflammatory	انترليوكين -١٢
(IL-12)	cytokine. <sup>1</sup> IL-12 is produced by dendritic cells (DCs) and	
	phagocytes in response to bacteria, bacterial products, and	
	intracellular parasites, and to some degree by B lymphocytes. <sup>2</sup>	
	In vivo IL-12 acts at three stages during the innate/adaptive	
	immune response to infection: 1. Early in the infection, it	
	induces production from NK and T cells of IFN-gamma, which	
	contributes to phagocytic cell activation and inflammation; 2. IL-	
	12 and IL-12-induced IFN-gamma favor Th1 cell differentiation	
	by priming CD4+ T cells for high IFN-gamma production; and	
	3. IL-12 contributes to optimal IFN-gamma production and to	
	proliferation of differentiated Th1 cells in response to antigen. <sup>2</sup>	
Interleukin-27	It has been more than 15 years since the identification of	انترليوكين -٢٧
(IL-27)	individual interleukin-27 (IL-27) and IL-27 receptor	
	components. <sup>4</sup> IL-27 along with IL-12, IL-23, and IL-35, belongs	
	to the IL-12 cytokine family. These family members play roles in	
	the regulation of T helper (Th) cell differentiation. IL-27 is	
	unique in that it suppresses immune responses. The	
	immunosuppressive effects of IL-27 depend on inhibition of the	
	development of Th17 cells (an inflammatory T-helper	
	population) and induction of IL-10 production. Moreover,	
	administration of IL-27 or augmentation of IL-27 signaling	
	suppresses some diseases of autoimmune or allergic origin,	
	demonstrating its potential in therapy of diseases mediated by	
	inflammatory cytokines. <sup>5</sup>	
Heterodimer	It is a protein composed of two polypeptide chains differing in	مثنوي مغاير آ
	composition in the order, number, or kind of their amino acid	
	residues <sup>6</sup> .	
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