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Recombinant Interleukin-6

National Cancer Institute

Source

National Cancer Institute. *Recombinant Interleukin-6*. NCI Thesaurus. Code C591.

A recombinant therapeutic agent which is chemically identical to or similar to the endogenous cytokine interleukin-6 (IL-6) with antiapoptotic, proinflammatory, antiinflammatory, proliferative and proangiogenic activities. IL-6 binds to its receptor (IL-6R), activating a receptor-CD130 receptor complex; the CD130 portion of the complex is a signal transduction protein that activates JAK kinases and Ras-mediated signaling pathways, which in turn activate downstream signaling pathways, resulting in the activation of various transcription factors (STAT, ELK-1, NF-IL-6, etc.) and gene transcription. The physiological effects of IL-6 are complex and varied and include hematopoietic, pyrogenic and thermogenic, proinflammatory, antiinflammatory, proliferative (anti-apoptotic), and angiogenic effects.