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# Ustekinumab

National Cancer Institute

## Source

National Cancer Institute. *Ustekinumab*. NCI Thesaurus. Code C84237.

An orally available, human, IgG1kappa, monoclonal antibody directed against the p40 protein subunit of both interleukin-12 (IL-12) and IL-23, with immunomodulating activity. Upon administration, ustekinumab binds to the p40 subunit of IL-12 and IL-23, blocking the binding of IL-12 and IL-23 to their interleukin receptors. This inhibits IL-12- and IL-23-mediated signaling and inhibits differentiation of CD4 positive T-cells into Th1 and Th17 cells. This prevents Th1- and Th17-mediated responses and cytokine production. This may prevent graft versus host disease (GVHD). IL-12 and IL-23, cytokines that play a key role in the regulation of the immune system, are upregulated in immune-mediated inflammatory disorders. Both Th1 and Th17 cells play a crucial role in GVHD.