

[Open Peer Review on Qeios](#)

Cintredekin Besudotox

National Cancer Institute

Source

National Cancer Institute. *Cintredekin Besudotox*. NCI Thesaurus. Code C2599.

A recombinant chimeric protein with potent antitumor activity. Cintredekin besudotox is composed of interleukin-13 (IL13), a pleiotropic immunoregulatory cytokine, linked to a mutated form of pseudomonas exotoxin A; this agent targets and kills tumor cells that express the IL13 receptor (IL13R). The IL13 moiety attaches to the IL13R on the tumor cell membrane, facilitating the entry of the exotoxin. The exotoxin moiety induces caspase-mediated apoptosis of tumor cells via a mechanism involving mitochondrial damage; it also catalyzes the transfer of ADP ribose from nicotinamide adenine dinucleotide (NAD) to elongation factor-2 in eukaryotic cells, thereby inactivating elongation factor 2 and inhibiting protein synthesis.