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# Denileukin Diftitox

National Cancer Institute

## Source

National Cancer Institute. *Denileukin Diftitox*. NCI Thesaurus. Code C1476.

A cytotoxic recombinant protein consisting of interleukin-2 (IL-2) protein sequences fused to diphtheria toxin. The IL-2 protein sequence moiety of denileukin difitox directs the cytotoxic action of diphtheria toxin to cells that express IL-2 receptors. After the toxin moiety is internalized into target IL-2 receptor-expressing cells, its catalytic domain catalyzes the transfer of the ADP-ribose moiety of NAD to a posttranslationally modified histidine residue of elongation factor 2 (EF-2), called diphthamine. This covalent modification inactivates EF-2 and disrupts polypeptide chain elongation, resulting in cell death. (NCI04)