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Recombinant Interferon

National Cancer Institute

Source

National Cancer Institute. *Recombinant Interferon*. NCI Thesaurus. Code C584.

One of a group of recombinant therapeutic glycoprotein cytokines with antiviral, anti-proliferative, and immunomodulating activities. Interferons bind to specific cell-surface receptors, leading to the transcription and translation of genes with interferon-specific response elements (ISREs). The resultant proteins mediate many complex effects, ultimately leading to inhibition of viral protein synthesis and cellular growth, alteration of cellular differentiation, interference with oncogene expression, activation of natural killer cells, alteration of cell surface antigen expression, and augmentation of lymphocyte and macrophage cytotoxicity. The production of endogenous interferons is induced in response to foreign agents such as bacteria, viruses and parasites and to tumor cells.