

[Open Peer Review on Qeios](#)

Lefitolimod

National Cancer Institute

Source

National Cancer Institute. *Lefitolimod*. NCI Thesaurus. Code C94207.

A synthetic oligonucleotide based on a proprietary double stem-loop immunomodulator design with potential immunostimulating activity. Lefitolimod binds to and activates intracellular T oll-like receptor 9 (TLR9) in monocytes/macrophages, plasmacytoid and myeloid dendritic cells (DCs), and natural killer (NK) cells, initiating immune signaling pathways and inducing T-helper 1 cell (Th1) production leading to the production of memory T cells and a Th1-mediated immune response. By activating the immune system, MGN1703 may attack tumor associated antigen (TAAs). TLR9 is a member of the TLR family, which plays a fundamental role in pathogen recognition and activation of innate immunity.