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TLR9 Agonist IMO-2055

National Cancer Institute

Source

National Cancer Institute. *TLR9 Agonist IMO-2055*. NCI Thesaurus. Code C74083.

A synthetic oligonucleotide containing unmethylated CpG dinucleotides with potential immunopotentiating activity. Mimicking unmethylated CpG sequences in bacterial DNA, TLR9 agonist IMO-2055 binds to and activates intracellular Toll-like receptors (TLR) 9 in monocytes/macrophages, plasmacytoid dendritic cells (DCs) and B cells, initiating immune signaling pathways and activating B cells and DCs and inducing T-helper cell cytokine production. TLR9 is a member of the TLR family, which plays a fundamental role in pathogen recognition and activation of innate immunity.