PD-L1/PD-L2 Peptide-Montanide Vaccine

National Cancer Institute

Source

A vaccine composed of peptides derived from the immune checkpoint molecules, programmed death ligand 1 (PD-L1) and programmed death ligand 2 (PD-L2), combined with the immunoadjuvant montanide ISA-51, with potential immunomodulating and antineoplastic activities. Vaccination with PD-L1/PD-L2 peptide-montanide vaccine may stimulate an immune response against PD-L1 and PD-L2 expressing cells. This may enhance T-cell proliferation, cytokine production, and T-cell mediated cytolysis. Binding of programmed cell death protein 1 (PD-1; PDCD1; CD279) by its ligands, PD-L1 and PD-L2, results in downregulation of T-cell responses and enhanced immune evasion. Montanide ISA-51, also known as incomplete Freund's adjuvant or IFA, is a stabilized water-in-oil emulsion adjuvant containing mineral oil with mannide oleate added as a surfactant that non-specifically stimulates cell-mediated immune responses to antigens.