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Montanide ISA-51 VG/KLH/NY-ESO-1/MART-1 Peptide Vaccine

National Cancer Institute

Source

National Cancer Institute. *Montanide ISA-51 VG/KLH/NY-ESO-1/MART-1 Peptide Vaccine*. NCI Thesaurus. Code C131215.

A cancer vaccine consisting of two immunogenic peptides derived from the cancer-testis antigen NY-ESO-1 and the melanoma differentiation antigen Melan-A (MART-1; Melanoma Antigen Recognized by T-cells 1), which are conjugated with the immunostimulant keyhole limpet hemocyanin (KLH) and emulsified in the immunoadjuvant Montanide ISA-51 VG, with potential immunomodulating and antineoplastic activities. Upon subcutaneous vaccination, the Montanide ISA-51 VG/KLH/NY-ESO-1/MART-1 peptide vaccine stimulates the host immune system to mount a cytotoxic T-lymphocyte (CTL) response against tumor cells expressing the NY-ESO-1 and Melan-A antigens, resulting in tumor cell lysis. NY-ESO-1 and Melan-A are overexpressed in a variety of tumor cell types. The surfactant mannide monooleate in Montanide ISA 51 VG is derived from vegetable-grade (VG) oleic acid that was purified from olive oil. KLH is a hapten carrier and serves as an immunostimulant to improve immune recognition.