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HLA-A*2402-Restricted KOC1-TTK-CO16-DEPDC1-MPHOSPH1 Multipeptide Vaccine

National Cancer Institute

Source

National Cancer Institute. *HLA-A*2402-Restricted KOC1-TTK-CO16-DEPDC1-MPHOSPH1 Multipeptide Vaccine*. NCI Thesaurus. Code C77868.

A cancer vaccine containing five HLA-A*2402-restricted peptide epitopes with potential immunostimulatory and antitumor activities. Peptide epitopes in this vaccine are derived from IGF II mRNA binding protein 3 (KOC1); TTK protein kinase (TTK); URLC10 (up-regulated lung cancer 10); DEP domain containing 1 (DEPDC1); and M phase phosphoprotein 1 (MPHOSPH1). Upon administration, HLA-A*2404-restricted KOC1-TTK-CO16-DEPDC1-MPHOSPH1 multipeptide vaccine may stimulate a cytotoxic T lymphocyte (CTL) response against tumor cells expressing KOC1, TTK, CO16, DEPDC1 and MPHOSPH1 peptides, resulting in tumor cell lysis and decreased tumor growth. HLA-A*2402 is an MHC class I molecule that presents antigenic peptides to CD8+ T cells; epitope design restricted to epitopes that bind most efficiently to HLA-A*2402 may improve antigenic peptide immunogenicity.