

[Open Peer Review on Qeios](#)

HLA-A*2402-Restricted CDCA1-URLC10-KIF20A-DEPDC1-MPHOSPH1 Multipeptide Vaccine

National Cancer Institute

Source

National Cancer Institute. *HLA-A*2402-Restricted CDCA1-URLC10-KIF20A-DEPDC1-MPHOSPH1 Multipeptide Vaccine*. NCI Thesaurus. Code C95207.

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 CDCA1 (cell division cycle-associated protein 1), URLC10 (up-regulated lung cancer 10), KIF20A (kinesin-like family member 20A), DEPDC1 (DEP domain containing 1), and MPHOSPH1 (M phase phosphoprotein 1). Upon administration, this peptide vaccine may stimulate a cytotoxic T lymphocyte (CTL) response against CDCA1-, URLC10-, KIF20A-, DEPDC1-, or MPHOSPH1-expressing tumor cells, 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.