

[Open Peer Review on Qeios](#)

# HLA-A\*2402-Restricted CDCA1-KIF20A Mulleptide Vaccine

National Cancer Institute

## Source

National Cancer Institute. *HLA-A\*2402-Restricted CDCA1-KIF20A Mulleptide Vaccine*.  
NCI Thesaurus. Code C90568.

A cancer vaccine containing two HLA-A\*2402-restricted peptide epitopes derived from cancer-testis antigens with potential immunostimulatory and antitumor activities. The peptide epitopes are derived from cell division associated 1 (CDCA1) and kinesin-like family member 20A (KIF20A). Upon administration, HLA-A\*2402-restricted CDCA1-KIF20A mulleptide vaccine may stimulate a cytotoxic T lymphocyte (CTL) response against CDCA1- and KIF20A-expressing tumor cells, resulting in tumor cell lysis and decreased tumor cell proliferation. 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.