

[Open Peer Review on Qeios](#)

# LMP2A-Specific Cytotoxic T-Lymphocytes

National Cancer Institute

## Source

National Cancer Institute. *LMP2A-Specific Cytotoxic T-Lymphocytes*. NCI Thesaurus. Code C62784.

A preparation of cytotoxic T-lymphocytes (CTL), specifically reactive to Epstein-Barr virus (EBV) latent membrane protein-2A (LMP2A), with potential antineoplastic activity. T-lymphocytes are exposed ex vivo to dendritic cells (DCs) transfected with a replication-deficient adenovirus encoding EBV LMP2A. Subsequently, LMP2A-specific CTLs are exposed to EBV infected cells transfected with adenovirus encoding LMP2A, thereby further stimulating CTLs. Administered to patients with EBV-positive tumors, LMP2A-specific CTLs target LMP2A-positive cells, resulting in cell lysis and inhibition of cancer cell proliferation. EBV LMP2A may be expressed in various malignancies, including nasopharyngeal carcinoma and Hodgkin and non-Hodgkin lymphomas.