

Open Peer Review on Qeios

Ad-hCMV-Flt3L

National Cancer Institute

Source

National Cancer Institute. <u>Ad-hCMV-Flt3L</u>. NCI Thesaurus. Code C105813.

A human serotype 5, replication-defective, first generation adenoviral vector, with the viral E1a and E3 protein encoding regions deleted, which is engineered to express the soluble, immune-mediated stimulatory gene human fms-like tyrosine kinase 3 ligand (Flt3L), under the transcriptional control of the CMV promoter, with potential immunostimulating activity. Upon administration, Ad-hCMV-Flt3L is transduced into tumor cells and Flt3L is expressed. Flt3L stimulates both the proliferation of dendritic cells (DCs) and their migration to the tumor site. Upon exposure to the tumor-associated antigens (TAA) released from dying glioma cells, which were killed by thymidine kinase-mediated valacyclovir-induced tumor cell death, the DCs initiate a specific immune response against any remaining TAA-expressing tumor cells. Flt3L is a hematopoietic growth factor and ligand for the Flt3 tyrosine kinase receptor.

Qeios ID: 4UCTA8 · https://doi.org/10.32388/4UCTA8