Open Peer Review on Qeios

Parvovirus H-1

National Cancer Institute

Source

National Cancer Institute. <u>Parvovirus H-1</u>. NCI Thesaurus. Code C96229.

A replication-competent oncolytic parvovirus with potential antineoplastic activity. Upon infection of host cells, parvovirus H-1 preferentially replicates in tumor cells compared to healthy normal cells, thereby potentially resulting in tumor cell lysis and leading to an inhibition of tumor cell proliferation. In addition, H1-infected tumor cells strongly induce the release of the inducible heat shock protein 72 (Hsp72i), which chaperone tumor associated antigens in the H1-mediated tumor lysates and may activate antigen presenting cells (APCs), thereby leading to antitumor immune responses. Parvovirus H-1 does not cause any pathogenic effect in normal, healthy cells and is able to cross the blood brain barrier (BBB).