

Human Cytomegalovirus (HCMV) is a herpesvirus that infects a majority of the world's population. There are many viral gene products that aid in virus infection and the establishment of the lifelong latency. UL111A, is a viral gene which, through alternate intron splicing, codes for two protein products cmvIL-10 and LAcmvIL-10 that mimic the structure of human interleukin-10 (hIL-10) to varying degrees. cmvIL-10 has been shown to have a wide range of physiological effects, whereas the effects of LAcmvIL-10 appear to be much more limited in scope. This study seeks to measure the expression levels of LAcmvIL-10 during lytic infection of fibroblasts, examine the dimerization patterns of hIL-10, cmvIL-10, and LAcmvIL-10, and understand the resultant signaling pathways activated by LAcmvIL-10 activity. Due to the far-reaching impact of this virus, a deeper understanding of its interactions with the host may lead to improved treatment and prevention options in the future.