

Keywords and Phrases for the Life Cycle of HIV.

Copies of these polyproteins enter the forming bud on the host cell's cytoplasmic membrane.

Copies the (-) cDNA strand into a (+) DNA to form a double-stranded DNA intermediate.

Enters the host cell's nucleus and uses the enzyme integrase to insert into one of the host cell's chromosomes to become a provirus.

gp41 and gp120 assemble and become inserted into the cytoplasmic membrane of the host cell.

HIV surface glycoprotein gp120 binds to a CD4 molecule on the host cell.

Molecules of (+) genomic RNA are transcribed off of the (-) proviral DNA strand.

Molecules of (+) mRNA are transcribed off of the (-) proviral DNA strand. Once synthesized, HIV mRNA goes through the nuclear pores to the host cell's ribosomes where it is translated into HIV polyprotein and regulatory proteins.

The gp120 can now interact with a host cell chemokine receptor.

The HIV enzyme reverse transcriptase is used to make a single-stranded DNA copy of the RNA genome.

The original RNA genome is degraded as the cDNA is synthesized.

The various HIV proteins assemble around the genome to form the nucleocapsid. Viruses obtain the envelope by budding from the host cell's cytoplasmic membrane.

These strains lead to immunosuppression.

These strains primarily transport the infection from person to person.

Transmembrane glycoprotein gp41, called the fusion peptide, enables the viral envelope to fuse with host cell membrane.

Two copies of these single-stranded genomic RNA molecules enter each forming bud on the host cell's cytoplasmic membrane.

Viral maturation and release from the host cell.

Viral entry or penetration: The nucleocapsid enters the cytoplasm of the host cell.

