

CLAIMS

1. A method for constructing a hepatitis virus infection model capable of recapitulating a viral life cycle, by infecting a liver bud with hepatitis virus, wherein said liver bud is formed by co-culturing liver cells derived from human induced pluripotent stem cells (iPSC) with human vascular endothelial cells and human mesenchymal cells.
2. The method of claim 1, wherein the vascular endothelial cells are human umbilical vein endothelial cells.
3. The method of claim 1, wherein the mesenchymal cells are human bone marrow-derived mesenchymal cells.
4. The method of claim 1, wherein the infecting hepatitis virus is hepatitis B virus, hepatitis C virus or hepatitis E virus.
5. A hepatitis virus infection model capable of recapitulating a viral life cycle, comprising a hepatitis virus-infected liver bud, wherein the liver bud is formed by co-culturing liver cells derived from human iPSC with human vascular endothelial cells and human mesenchymal cells.
6. The virus infection model of claim 5, wherein the infecting hepatitis virus is hepatitis B virus, hepatitis C virus or hepatitis E virus.
7. A method of screening for substances with antiviral activity, comprising using the virus infection model of claim 5.
8. A method of screening for substances with antiviral activity, comprising using the virus infection model of claim 6.