

Table 1. Comparative analysis of HCV cellular models

System	cell	virion	major use	advantages ^a	inconveniences ^a	relevance to in vivo
pseudoparticles	Huh-7	HCVpp	viral entry, antibody neutralisation activity	easy to set up practical	not natural virions tumor cells no replication	+/-
subgenomic replicons	Huh-7	-	anti-NS3/4, -NS5B testing	easy to set up practical	no virion tumor cells cell cycle dependence abnormal host antiviral activity no drug metabolism	+/-
productive replicons	Huh-7.5	HCVcc	any aspect of HCV biology	easy to set up practical	not natural virions tumor cells cell cycle dependence abnormal host antiviral activity no drug metabolism	+
Immortalized hepatocytes	PH5CH IMM, FLC4 HuS-E, HuS-T	HCVser HCVcc	any aspect of HCV biology	practical	immortalized cells cell cycle dependence drug metabolism ?	++

hepatocyte
cultures

fetal hepatocyte	HCVser	any aspect of HCV biology	differentiated cells	not practical, limited availability drug metabolism ?	++
	HCVpp				
	HCVcc				
adult hepatocyte	HCVser	any aspect of HCV biology	differentiated cells metabolic competence	not practical limited availability	+++
	HCVpp				
	HCVcc				

a : see section 5 for further comments