

Table S1. Antibody list

Antibodies	Analyses	Dilution	Supplier	Catalog #	Clone
Rabbit OCT4	IF/FC	1 : 400/1 : 200	Abcam	ab18976	Polyclonal
Mouse NANOG	IF	1 : 200	Abcam	ab62734	NNG-811
Mouse SSEA4	IF/FC	1 : 200/1 : 250	GeneTex	GTX48037	MC-813-70
Goat SOX17	IF/FC	1 : 200/1 : 50	R&D Systems	AF1924	Polyclonal
Mouse FOXA2	IF/FC	1 : 100/1 : 250	GeneTex	GTX84485	3C10
Rabbit BRA	FC	1 : 200	Abcam	ab209665	EPR18113
Mouse NESTIN	FC	1 : 100	GeneTex	GTX30671	10C2
Rabbit HNF4A	IF/FC	1 : 500/1 : 500	Abcam	ab201460	EPR16885-99
Mouse AFP	IF/FC	1 : 200/1 : 100	Abcam	ab212325	C2
Rabbit SOX9	IF/FC	1 : 200/1 : 100	Abcam	ab185230	EPR14335
Rabbit ALB	IF/FC	1 : 300/1 : 300	Abcam	ab207327	EPR20195
Mouse AAT	IF	1 : 200	GeneTex	GTX34403	AAT/1378
Rabbit CK19	IF/FC	1 : 200/1 : 50	Abcam	ab52625	EP1580Y
Mouse CYP3A4	IF	1 : 200	GeneTex	GTX60577	3H8
Mouse Ac-a-tubulin	IF	1 : 400	Cell Signaling	12152	6-11B-1
Rabbit CFTR	IF	1 : 400	Cell Signaling	78335	D6W6L
Donkey anti-Rabbit IgG Alexa Fluor 488	IF/FC	1 : 500	Invitrogen	R37118	Polyclonal
Donkey anti-Rabbit IgG Alexa Fluor 594	IF/FC	1 : 500	Invitrogen	R37119	Polyclonal
Donkey anti-Mouse IgG Alexa Fluor 488	IF/FC	1 : 500	Invitrogen	R37114	Polyclonal
Donkey anti-Mouse IgG Alexa Fluor 594	IF/FC	1 : 500	Invitrogen	R37115	Polyclonal
Donkey anti-goat IgG Alexa Fluor 594	IF/FC	1 : 500	Invitrogen	A-11058	Polyclonal

FC: flow cytometry, IF: immunofluorescence.

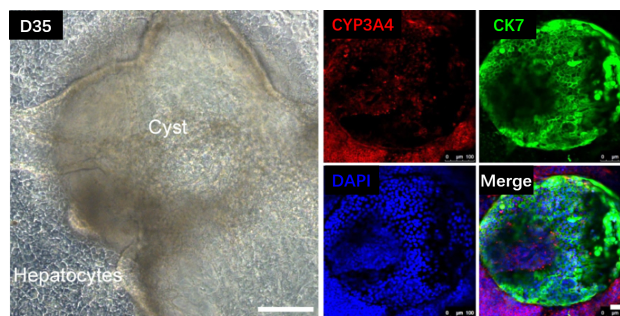


Fig. S1. Co-presentation of hepatic and biliary lineages in D35 HBO. Bright-field (left) and immunostaining (right) images showed the parallel generation of hepatocytes and cholangiocytes. Scale bars, 100 μ M.