Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Statistic information of cells.

File Name: Supplementary Data 2

Description: Differentially expressed genes (DEGs) between DE-derived gut and VE-

derived gut.

File Name: Supplementary Data 3

Description: Differentially expressed genes (DEGs) between DE-derived gut and PS.

File Name: Supplementary Data 4

Description: Feature genes list for cell state definition.

File Name: Supplementary Data 5

Description: Differentially expressed genes (DEGs) between gallbladder primordium

and gut tube.

File Name: Supplementary Data 6

Description: Gene groups of the epithelial-hepatic transition (EHT) dynamic

transition.

File Name: Supplementary Data 7

Description: Differentially expressed genes (DEGs) between liver primordium and

gut tube.

File Name: Supplementary Data 8

Description: Genes list which are identified with RXRA motif.

File Name: Supplementary Data 9

Description: Dynamic gene expression during hepatoblast development.