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**Supplementary information**

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**Establishment of human fetal hepatocyte organoids and CRISPR–Cas9-based gene knockin and knockout in organoid cultures from human liver**

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# **Establishment of human fetal hepatocyte organoids and CRISPR-Cas9 based gene knock-in and knock-out in organoid cultures from human liver**

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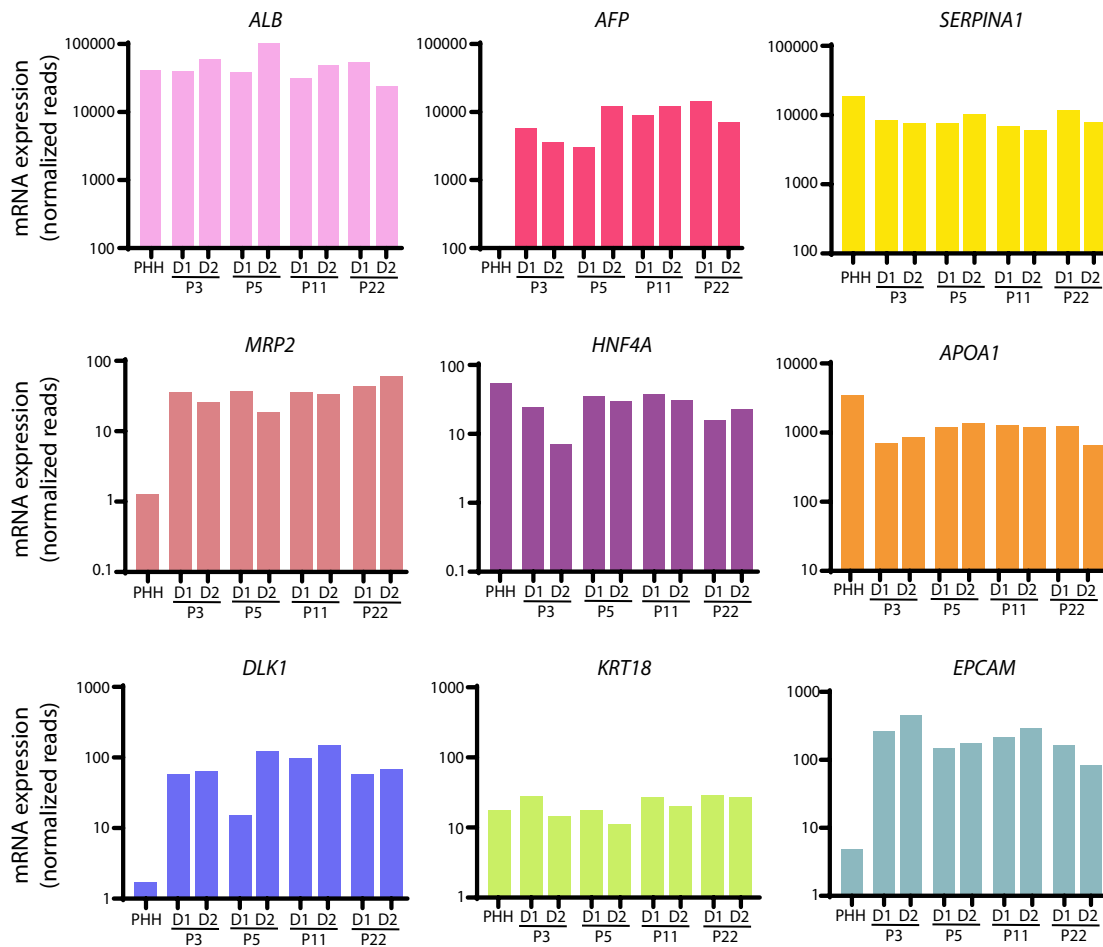
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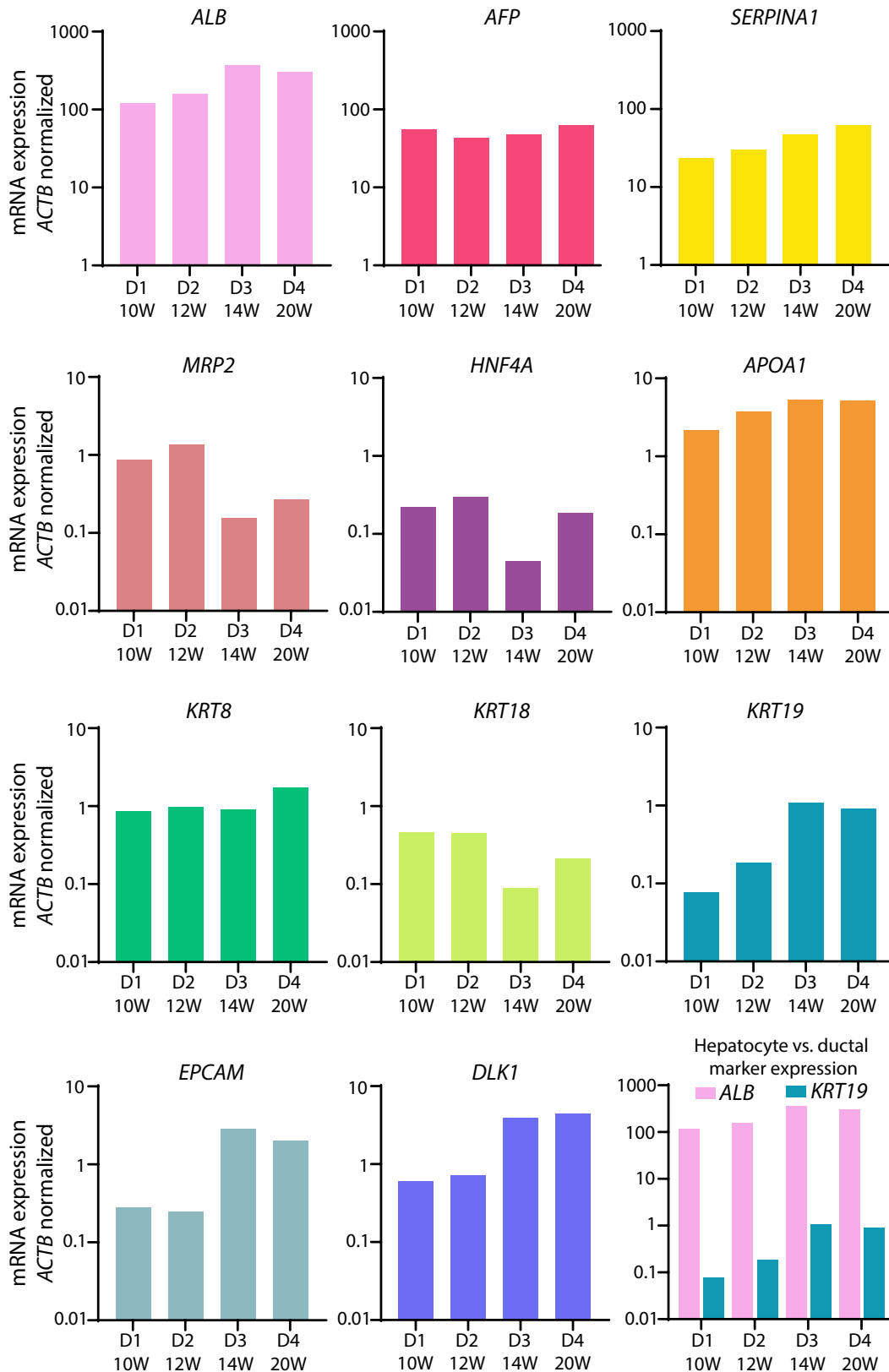
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**Supplementary Figure 1: Hepatic marker expression over passaging of human fetal hepatocyte organoids.** Bar plots showing the mRNA expression from bulk RNA-sequencing (read counts normalized) for selected hepatocyte, biliary, and hepatoblast markers in human fetal hepatocyte organoid lines derived from 2 different donors (D1, D2) at early and late passages (ranging from passage 3 to 22) and comparison with expression profiles of adult primary human hepatocytes (PHH). Data presented here is an alternative representation of the data published previously originally (in ref 20) of RNA-sequencing data deposited in GSE111301.



**Supplementary Figure 2: Hepatic marker expression of human fetal hepatocyte organoids derived from different gestational ages.** Bar plots showing the mRNA expression from bulk RNA-sequencing (normalized over the expression of the housekeeping gene *ACTB*) for selected hepatocyte, biliary, and hepatoblast markers in human fetal hepatocyte organoid lines derived from 4 different

donors (D1, D2, D3, D4) ranging in age from 10 to 20 gestational weeks. Data from 10W and 12W samples has not been published previously; the data from 14W and 20W is an alternative representation of the RNA-sequencing data described in ref 20 (deposited in GSE111301).