|  |  |  |
| --- | --- | --- |
|  | Gene Name | Pearson Coefficient |
| Pericentral | Cyp2e1 | 0.979 |
| Cyp1a2 | 0.944 |
| Oat | 0.907 |
| Rgn | 0.971 |
| Periportal | Cyp2f2 | 0.954 |
| Alb | 0.936 |
| Sds | 0.964 |
| Hal | 0.948 |
|  | Median | 0.951 |

**Table 1. Pearson correlation coefficient comparing control hepatocytes reconstruction profile of landmark genes.** To validate our spatial reconstruction of the liver lobule, we compared the spatial profile of pericentral or periportal landmark genes (Halpern 2017) to the spatial reconstruction by Halpern 2017.

**Table 2. Pearson correlation coefficient comparing acetaminophen hepatocytes reconstruction profile of landmark genes.** To validate our spatial reconstruction of the acetaminophen liver lobule, we compared the spatial profile of pericentral or periportal landmark genes (Halpern 2017) to our spatial reconstruction of our control hepatocytes.

|  |  |  |
| --- | --- | --- |
|  | Gene Name | Pearson Coefficient |
| Pericentral | Cyp2e1 | 0.985 |
| Cyp1a2 | 0.987 |
| Oat | 0.944 |
| Rgn | 0.996 |
| Periportal | Cyp2f2 | 0.991 |
| Alb | 0.991 |
| Sds | 0.998 |
| Hal | 0.993 |
|  | Median | 0.991 |

|  |  |  |
| --- | --- | --- |
|  | Gene Name | Pearson Coefficient |
| Pericentral | Cyp2e1 | 0.979 |
| Cyp1a2 | 0.944 |
| Oat | 0.907 |
| Rgn | 0.971 |
| Periportal | Cyp2f2 | 0.954 |
| Alb | 0.936 |
| Sds | 0.964 |
| Hal | 0.948 |
|  | Median | 0.951 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Gene Name | Pearson Coefficient (control vs human liver) | Pearson Coefficient (APAP vs human liver) |
| Pericentral | Cyp2e1 | 0.881 | 0.869 |
| Cyp1a2 | 0.966 | 0.954 |
| Apoc1 | 0.9953 | 0.918 |
| Apoe | 0.927 | 0.894 |
| Periportal | Alb | 0.927 | 0.886 |
| Pck1 | 0.868 | 0.796 |
| Fgg | 0.961 | 0.901 |
| Aldob | 0.906 | 0.851 |
|  | Median | 0.927 | 0.890 |

**Table 3. Pearson correlation coefficient comparing control and acetaminophen hepatocytes reconstruction profile of landmark genes to untreated human hepatocytes.** To validate our spatial reconstruction of the human liver lobule, we compared the spatial profile of pericentral or periportal landmark genes (Halpern 2017) to our spatial reconstruction of our control hepatocytes and acetaminophen hepatocytes.