**Supplementary Table 3.** Top-25 enriched gene sets in module 9 (containing HBV-RNA) as shown in Fig. 2E. The enrichment analysis was performed including only genes showing a similar expression profile according to a self-organizing maps analysis in hepatocytes and HCC cells. FDR: false discovery rate.

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene Set Name** | **Genes** | **Overlap** | **FDR** |
| HSIAO\_LIVER\_SPECIFIC\_GENES | 249 | 16 | 1.43E-12 |
| HSIAO\_HOUSEKEEPING\_GENES | 399 | 18 | 4.35E-12 |
| ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_DN | 354 | 16 | 1.15E-10 |
| STARK\_PREFRONTAL\_CORTEX\_22Q11\_DELETION\_DN | 523 | 18 | 2.23E-10 |
| LEI\_MYB\_TARGETS | 323 | 15 | 2.98E-10 |
| WONG\_MITOCHONDRIA\_GENE\_MODULE | 217 | 13 | 4.15E-10 |
| MOOTHA\_MITOCHONDRIA | 449 | 16 | 1.84E-9 |
| WANG\_TUMOR\_INVASIVENESS\_UP | 383 | 15 | 2.14E-9 |
| LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_DN | 151 | 11 | 2.22E-9 |
| HOSHIDA\_LIVER\_CANCER\_SUBCLASS\_S3 | 266 | 13 | 3.28E-9 |
| REACTOME\_BIOLOGICAL\_OXIDATIONS | 221 | 12 | 5.9E-9 |
| MOOTHA\_HUMAN\_MITODB\_6\_2002 | 430 | 15 | 7.34E-9 |
| KEGG\_OXIDATIVE\_PHOSPHORYLATION | 131 | 10 | 9.55E-9 |
| FLECHNER\_BIOPSY\_KIDNEY\_TRANSPLANT\_REJECTED\_VS\_OK\_DN | 553 | 16 | 2.04E-8 |
| SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_UP | 484 | 15 | 3.07E-8 |
| KEGG\_METABOLISM\_OF\_XENOBIOTICS\_BY\_CYTOCHROME\_P450 | 70 | 8 | 3.14E-8 |
| KINSEY\_TARGETS\_OF\_EWSR1\_FLII\_FUSION\_DN | 333 | 13 | 3.16E-8 |
| REACTOME\_RESPIRATORY\_ELECTRON\_TRANSPORT\_ATP\_ SYNTHESIS\_BY\_CHEMIOSMOTIC\_COUPLING\_AND\_HEAT\_ PRODUCTION\_BY\_UNCOUPLING\_PROTEINS | 124 | 9 | 1.06E-7 |
| ACEVEDO\_LIVER\_CANCER\_DN | 540 | 15 | 1.06E-7 |
| LOPEZ\_MBD\_TARGETS | 952 | 19 | 1.06E-7 |
| REACTOME\_METABOLISM\_OF\_AMINO\_ACIDS\_AND\_DERIVATIVES | 374 | 13 | 1.06E-7 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_PROLIFERATION\_DN | 178 | 10 | 1.17E-7 |
| KEGG\_PARKINSONS\_DISEASE | 128 | 9 | 1.17E-7 |
| KEGG\_HUNTINGTONS\_DISEASE | 180 | 10 | 1.19E-7 |
| MOOTHA\_VOXPHOS | 87 | 8 | 1.19E-7 |