

Table S4: Functional Epigenetic Modules

| Module (Seed Gene) | EntrezID | Gene Symbol | stat (DNAm)* | p-value  |
|--------------------|----------|-------------|--------------|----------|
| UNC119             | 9094     | UNC119      | -5.09        | 3.00E-06 |
|                    | 306      | ANXA3       | 1.17         | 0.25     |
|                    | 379      | ARL4D       | 1.50         | 0.14     |
|                    | 2948     | GSTM4       | 0.79         | 0.43     |
|                    | 81890    | QTRT1       | -0.45        | 0.65     |
|                    | 7572     | ZNF24       | -0.65        | 0.52     |
|                    | 1031     | CDKN2C      | -0.79        | 0.43     |
|                    | 6783     | SULT1E1     | 1.84         | 0.07     |
|                    | 5464     | PPA1        | -1.93        | 0.06     |
|                    | 1787     | TRDMT1      | -1.40        | 0.17     |
|                    | 10063    | COX17       | 0.06         | 0.95     |
|                    | 1164     | CKS2        | -0.58        | 0.56     |
|                    | 5863     | RGL2        | -1.91        | 0.06     |
|                    | 53826    | FXYD6       | -0.50        | 0.62     |
|                    | 3117     | HLA-DQA1    | 1.45         | 0.15     |
|                    | 55274    | PHF10       | 0.06         | 0.95     |
|                    | 402      | ARL2        | 2.27         | 0.03     |
|                    | 1070     | CETN3       | -2.00        | 0.05     |
|                    | 54810    | GIPC2       | 0.67         | 0.50     |
|                    | 27436    | EML4        | 3.88         | 0.00     |
|                    | 7809     | BSND        | 0.79         | 0.43     |
|                    | 5522     | PPP2R2C     | -0.42        | 0.68     |
|                    | 23568    | ARL2BP      | -0.77        | 0.44     |
|                    | 4809     | SNU13       | 1.62         | 0.11     |
|                    | 6820     | SULT2B1     | -0.36        | 0.72     |
|                    | 60492    | CCDC90B     | 0.85         | 0.40     |
|                    | 84056    | KATNAL1     | 1.27         | 0.21     |
|                    | 6904     | TBCD        | 1.32         | 0.19     |
|                    | 6903     | TBCC        | -3.33        | 0.00     |
|                    | 6905     | TBCE        | -0.52        | 0.61     |
|                    | 7976     | FZD3        | 1.66         | 0.10     |
|                    | 5068     | REG3A       | 0.13         | 0.90     |
|                    | 51282    | SCAND1      | 2.24         | 0.03     |
|                    | 7579     | ZSCAN20     | -1.11        | 0.27     |
|                    | 10127    | ZNF263      | 0.52         | 0.60     |
|                    | 90933    | TRIM41      | -1.54        | 0.13     |
|                    | 130540   | ALS2CR12    | -1.69        | 0.10     |
| BCL2A1             | 597      | BCL2A1      | -4.46        | 3.00E-05 |
|                    | 10018    | BCL2L11     | -0.69        | 0.49     |
|                    | 578      | BAK1        | -0.55        | 0.58     |
|                    | 5366     | PMAIP1      | -0.77        | 0.45     |
|                    | 638      | BIK         | -2           | 0.05     |
|                    | 5452     | POU2F2      | -2.7         | 0.01     |
|                    | 599      | BCL2L2      | 3.34         | 1.00E-03 |
|                    | 90427    | BMF         | -1.06        | 0.29     |
|                    | 7417     | VDAC2       | -1.51        | 0.14     |
|                    | 55669    | MFN1        | 0.09         | 0.93     |
| ROBO3              | 64221    | ROBO3       | 3.97         | 2.00E-04 |

|       |         |       |          |
|-------|---------|-------|----------|
| 11061 | CNMD    | 2.01  | 0.05     |
| 1191  | CLU     | -2.8  | 0.01     |
| 712   | C1QA    | 1.11  | 0.27     |
| 10924 | SMPDL3A | 3.01  | 4.00E-03 |
| 714   | C1QC    | 1.57  | 0.12     |
| 1356  | CP      | -0.8  | 0.43     |
| 713   | C1QB    | -2.63 | 0.01     |
| 715   | C1R     | 3.15  | 2.00E-03 |
| 64386 | MMP25   | 1.92  | 0.06     |
| 716   | C1S     | -0.44 | 0.67     |
| 730   | C7      | 3.65  | 5.00E-04 |
| 5444  | PON1    | 0.75  | 0.45     |
| 3273  | HRG     | 0.03  | 0.98     |
| 732   | C8B     | -0.64 | 0.52     |
| 727   | C5      | 1.41  | 0.16     |
| 735   | C9      | -0.05 | 0.96     |
| 731   | C8A     | 1.4   | 0.17     |
| 1369  | CPN1    | -0.8  | 0.43     |
| 1370  | CPN2    | -0.37 | 0.71     |

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\* stat (DNAm): estatística da metilação diferencia calculado pelo algoritmo FEM