**S4**. The potential target sites of transcription factors from GSEA, for 78 up-regulated DEGs.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TF binding site** | **Conserved motif in target** | **Count** | **P-value** | **FDR** | **Genes** |
| FOXO4\_01 | TTGTTT | 13 | 4.13E-05 | 1.27E-02 | *RIT1, CLC, FKBP5, AGR2, CD36, RUNX2, NTRK2, GRK5, GATA2, ST6GAL1, SLC7A1, SLC18A2, SERPINB10* |
| LEF1\_Q2 | CTTTGT\_ | 12 | 1.18E-04 | 1.45E-02 | *RIT1, CLC, FKBP5, GRK5, GATA2, ST6GAL1, GSN, AKAP12, FHL1, DPYSL3, KIT, SLC39A8* |
| MAZ\_Q6 | GGGAGGRR\_ | 12 | 4.36E-04 | 3.35E-02 | *CLC, SERPINB2, NTRK2, GRK5, POSTN, GSN, AKAP12, IGF2BP3, SNCA, CD44, FGFBP1, AGPS* |
| AP1\_C | TGANTCA\_ | 10 | 2.01E-05 | 1.24E-02 | *RIT1, CLC, FKBP5, AGR2, S100A2, SERPINB2, SPRR1A, MMP1, SPRR1B, TFF1* |
| TATA\_01 | TATAAA\_ | 10 | 6.79E-05 | 1.39E-02 | *RIT1, S100A2, SERPINB2, SPRR1A, CD36, RUNX2, POSTN, DEFB1, NOS2, HIST1H2BK* |
| AP1FJ\_Q2 | - | 5 | 9.69E-05 | 1.45E-02 | *CLC, S100A2, NTRK2, GSN, PTPRH* |
| UNKNOWN | SMTTTTGT\_ | 5 | 6.25E-04 | 4.27E-02 | *FKBP5, NTRK2, GRK5, GATA2, ST6GAL1, SLC7A1, PTGS1* |
| GFI1\_01 | TGATTTRY\_ | 5 | 1.49E-04 | 1.53E-02 | *AGR2, CD36, IGF2BP3, SNCA, NMU* |
| NFE2\_01 | TGASTMAGC\_ | 4 | 3.51E-04 | 3.08E-02 | *RIT1, CLC, S100A2, CD44* |