

Supplemental table S11: List of genes regulated by soy, classified by biological functions

A- Anterior Pituitary

| Category | # of genes | P value | Genes |
|--|------------|-------------------|---|
| Cellular Growth and Proliferation | 19 | 3,28E-04-2,02E-02 | <i>Cbfb, F2r, Gja1, Timp3, Cks2, Vegfa, Sncg, Gfm1, Reck, Cdk1, Mthfd1, Mtus1, Vdac1, Ar, Cd151, Igfbp7, Lum, Ptpn3, Hsd3b7</i> |
| Cellular Assembly and Organization | 17 | 1,49E-04-2,24E-02 | <i>Cbfb, F2r, Nckap1l, Gja1, Timp3, Vegfa, Sncg, Rab3a, Gfm1, Reck, Cdk1, Klc1, Vdac1, Robo2, Kctd13, Ar, Lum</i> |
| Small Molecule Biochemistry | 16 | 1,6E-03-2,34E-02 | <i>F2r, Aco1, Gja1, Vegfa, Sncg, Dnmt3a, Hfe, Cdk1, Mthfd1, Ctgs, Vdac1, Ar, Igfbp7, Pex7, Atp2b2, Pde10a</i> |
| Cellular Movement | 15 | 1,49E-04-2,43E-02 | <i>F2r, Cbfb, Nckap1l, Gja1, Timp3, Vegfa, Sncg, Reck, Cdk1, Nqo2, Robo2, Ar, Cd151, Lum, Pex7</i> |
| Cellular Function and Maintenance | 14 | 1,52E-04-2,31E-02 | <i>F2r, Gja1, Aco1, Timp3, Vegfa, Hla-E, Rab3a, Hfe, Cdk1, Vdac1, Ar, Cd151, Dsg2, Atp2b2</i> |
| Cell Morphology | 14 | 2,02E-04-2E-02 | <i>F2r, Cbfb, Gja1, Timp3, Vegfa, Sncg, Racgap1, Reck, Robo2, Ar, Cd151, Igfbp7, Lum, Atp2b2</i> |
| Cell-To-Cell Signaling and Interaction | 10 | 1,31E-03-2E-02 | <i>F2r, Timp3, Gja1, Vegfa, Sncg, Ar, Cd151, Rab3a, Dsg2, Vdac1</i> |
| Molecular Transport | 8 | 3,24E-03-2E-02 | <i>F2r, Gja1, Aco1, Hfe, Rab3a, Pde10a, Atp2b2, Vdac1</i> |
| Cellular Development | 7 | 1,37E-03-2E-02 | <i>Timp3, Gja1, Vegfa, Ar, Gfm1, Igfbp7, Lum</i> |
| Nucleic Acid Metabolism | 7 | 1,6E-03-2,06E-02 | <i>F2r, Gja1, Cdk1, Ctgs, Pde10a, Atp2b2, Vdac1</i> |
| Cell Cycle | 7 | 2,52E-03-2,36E-02 | <i>Cks2, Vegfa, Ar, Igfbp7, Racgap1, Ttc19, Cdk1</i> |
| Cell Signaling | 7 | 5,04E-03-1,63E-02 | <i>Nckap1l, Gja1, Vegfa, Hfe, Cdk1, Atp2b2, Vdac1</i> |
| Gene Expression | 7 | 5,04E-03-2E-02 | <i>Cbfb, Aco1, Dnmt3a, Ar, Hrsp12, Cdk1, Dusp26</i> |
| Cellular Compromise | 6 | 4,48E-03-1,5E-02 | <i>Gja1, Vegfa, Sncg, Ar, Hfe, Racgap1</i> |
| Cell Death | 5 | 5,04E-03-2E-02 | <i>F2r, Gja1, Vegfa, Lum, Vdac1</i> |
| Lipid Metabolism | 4 | 2,87E-03-1,5E-02 | <i>F2r, Vegfa, Igfbp7, Pex7</i> |
| Energy Production | 4 | 3,24E-03-2,06E-02 | <i>F2r, Gja1, Cdk1, Vdac1</i> |
| Vitamin and Mineral Metabolism | 4 | 5,04E-03-1,18E-02 | <i>Gja1, Vegfa, Atp2b2, Vdac1</i> |
| Protein Synthesis | 4 | 1E-02-1,63E-02 | <i>Nckap1l, Hrsp12, Hfe, Cdk1</i> |
| Antigen Presentation | 4 | 1,46E-02-1,5E-02 | <i>F2r, Nckap1l, Vegfa, Cd151</i> |
| Post-Translational Modification | 4 | 1,5E-02-1,63E-02 | <i>Nckap1l, Vegfa, Hfe, Cdk1</i> |
| Carbohydrate Metabolism | 3 | 5,04E-03-1,5E-02 | <i>Aco1, Atp2b2, Vdac1</i> |
| DNA Replication, Recombination, and Repair | 3 | 1E-02-2E-02 | <i>Vegfa, Dnmt3a, Cdk1</i> |
| Drug Metabolism | 2 | 2,87E-03-2,87E-03 | <i>Vegfa, Igfbp7</i> |
| RNA Post-Transcriptional Modification | 2 | 7,51E-03-7,51E-03 | <i>Aco1, Cdk1</i> |
| Amino Acid Metabolism | 2 | 2E-02-2,34E-02 | <i>Dnmt3a, Mthfd1</i> |

B- Hypothalamus

| Category | # of genes | P value | Genes |
|--|------------|-------------------|--------------------------------|
| Cellular Assembly and Organization | 4 | 1,21E-03-4,14E-02 | <i>Ston2, Fmod, Nf1, Cit</i> |
| Molecular Transport | 4 | 1,21E-03-4,72E-02 | <i>Nf1, Pdyn, Hla-C, Ero1l</i> |
| Cell Death | 3 | 1,21E-03-3,09E-02 | <i>Fmod, Nf1, Hla-C</i> |
| Cell-To-Cell Signaling and Interaction | 3 | 1,21E-03-2,5E-02 | <i>Nf1, Pdyn, Hla-C</i> |
| Cellular Growth and Proliferation | 3 | 1,21E-03-4,72E-02 | <i>Nf1, Hla-C, Cit</i> |
| Small Molecule Biochemistry | 3 | 6,01E-03-2,03E-02 | <i>Nf1, Pdyn, Ero1l</i> |
| Cellular Development | 3 | 9,61E-03-4,94E-02 | <i>Nf1, Cit, Ero1l</i> |
| Cellular Compromise | 2 | 1,21E-03-2,15E-02 | <i>Pdyn, Cit</i> |
| DNA Replication, Recombination, and Repair | 2 | 1,08E-02-1,44E-02 | <i>Kat6a, Cit</i> |
| Cellular Function and Maintenance | 2 | 3,09E-02-3,56E-02 | <i>Nf1, Cit</i> |