**Lists of common genes the top 200 upregulated and downregulated DEG analyses. The details are listed below:**

1. **Common genes of CAST-1 UPREGULATED group**: 0 (no common genes were present in the top 200 upregulated genes of CAST-1 between 231 and T47D).
2. **Common genes of CAST-1 DOWN-REGULATED group**: 2

Table 1 Lists of known common genes of the top 200 downregulated genes in T47D-CAST-I and MDA-MB-231 CAST-I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Genes | Fold change in T47D-CAST-I | p-value | Fold change in 231 CAST-I | p-value |
| DCAF8L1 | -9.039 | 1.29E-13 | -6.352 | 2.11E-23 |
| MAGEA11 | -6.253 | 1.5E-270 | -4.929 | 2.64E-68 |

1. **Common genes of CAST-2 UPREGULATED group**: 0 (no common genes were present in the top 200 upregulated genes of CAST-2 between 231 and T47D).
2. **Common genes of the CAST-2 DOWN-REGULATED group**: 3

Table 2. List of common genes of the top 200 downregulated genes in T47D-CAST-II and MDA-MB-231 CAST-II

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Genes | Fold change in T47D CAST-2 | p-value | Fold change in 231 CAST-2 | p-value |
| OLFML1 | -5.694 | 0.000194 | -3.413 | 1.59E-10 |
| ARHGAP28 | -5.272 | 0.000911 | -5.272 | 0.000911 |
| LINC01425 | -4.709 | 0.00716 | -4.518 | 8.44E-11 |

1. **Common genes of the CAST-3 Upregulated group**: 3

Table 3. Lists of common genes of the top 200 upregulated genes in T47D-CAST-III and MDA-MB-231 CAST-III

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Genes | Fold change in T47D-CAST-3 | p-value | Fold change in 231 CAST-3 | p-value |
| **MAGEB2** | 15.564 | 3.43E-39 | 6.877 | 4.21E-78 |
| LINC02434 | 6.397 | 0.00000414 | 6.743 | 9.87E-08 |
| **SLCO5A1** | 4.337 | 2.13E-14 | 5.242 | 0.00017 |

1. **Common genes of the CAST-3 DOWN-REGULATED group**: 3

Table 4. List of common genes of the top 200 downregulated genes in T47D-CAST-III and MDA-MB-231 CAST-III

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Genes | Fold change in T47D CAST-3 | p-value | Fold change in 231 CAST-3 | p-value |
| **NTRK2** | -4.925 | 7.24E-11 | -7.252 | 7.41E-08 |
| MAGEA11 | -3.039 | 8.22E-96 | -11.883 | 2.18E-22 |
| UNC13A | -2.871 | 4.35E-36 | -8.743 | 6.06E-12 |