| Gene | Protein Name | OC/ND ratio | Gene | Protein | OC/ND ratio | Gene | Protein Name | OC/ND ratio |
|---------|----------------------------|-------------|----------|----------------|-------------|-----------|--------------------|-------------|
| MCF10A | (MCF10A) | (MCF10A) | MCF10AT1 | Name | (MCF10AT1) | MCF10CA1a | (MCF10CA1a) | (MCF10CA1a) |
| cells | | | cells | (MCF10AT1) | | cells | | |
| SCEL | Scellicin | 5318.64 | HTRA2 | High | 7.36 | ACAA2 | Acetyl-CoA | 82.61 |
| | | | | temperature | | | acyltransferase 2 | |
| | | | | requirement | | | | |
| | | | | A2 | | | | |
| ALDH7A1 | Aldehyde dehydrogenase | 3111.33 | PMPCB | Peptidase | 5.86 | ATP2B4 | Plasma | 37.51 |
| | 7 family member A1 | | | (mitochondrial | | | membrane | |
| | | | | processing) | | | calcium- | |
| | | | | beta | | | transporting | |
| | | | | | | | ATPase 4 | |
| ECH1 | Enoyl CoA hydratase 1 | 2711.84 | CLPP | ATP- | 5.58 | LETM1 | Leucine zipper- | 33.35 |
| | | | | dependent | | | EF-hand | |
| | | | | Clp protease | | | containing | |
| | | | | proteolytic | | | transmembrane | |
| | | | | subunit | | | protein 1 | |
| TRAP1 | TNF Receptor Associated | 1730.73 | | | | PCCB | Propionyl-CoA | 31.27 |
| | Protein 1 | | | | | | carboxylase beta | |
| | | | | | | | chain | |
| ACAA2 | Acetyl-CoA acyltransferase | 1220.09 | | | | CEACAM5 | Carcinoembryonic | 24.58 |
| | 2 | | | | | | antigen-related | |
| | | | | | | | cell adhesion | |
| | | | | | | | molecule 5 | |
| АКЗ | Adenylate kinase 3 | 981.946 | | | | PTPRF | Protein tyrosine | 21.94 |
| | | | | | | | phosphatase | |
| | | | | | | | receptor type F | |
| UOCRC1 | Ubiquinol-cytochrome c | 854 604 | | | | MST1R | Macrophage | 21.13 |
| | reductase core protein l | | | | | | stimulating 1 | |
| | | | | | | | recentor | |
| DOVD | Disarband/Lyndulaga | 810.090 | | | | | | 16.00 |
| DUXR | Dicarbonyi/L-xylulose | 019.909 | | | | CININIMIS | | 16.02 |
| | reduciase | | | | | | | |
| | | | | | | | metal cation | |
| | | | | | | | transport mediator | |
| | | | | | | | 3 | |
| SSBP1 | Single-stranded DNA- | 808.072 | | | | SLC27A4 | Fatty acid | 14.53 |
| | binding protein 1 | | | | | | transporter 4 | |

| NDUFB6 | NADH dehydrogenase | 757.227 | | | | CD70 | CD70 molecule | 14.45 |
|----------|-----------------------------|---------|---|---|---|----------------|--------------------|-------|
| | [ubiquinone] 1 beta | | | | | | | |
| | | | | | | | | |
| | subcomplex 6 | | | | | | | |
| S100A14 | S100 calcium-binding | 725.033 | | | | ST14 | Suppression of | 13.58 |
| | protein A14 | | | | | | tumorigenicity 14 | |
| | | | | | | | (serine pentidase) | |
| | | | | | | | | |
| S100A9 | S100 calcium-binding | 680.512 | | | | ECHS1 | Enoyl-CoA | 13.28 |
| | protein A9 | | | | | | hydratase, short | |
| | | | | | | | chain 1 | |
| S100A8 | S100 calcium-binding | 621.973 | | | | PVRL4 | Poliovirus | 13.12 |
| | protoin AQ | | | | | | recenter related | - |
| | protein Ao | | | | | | receptor-related | |
| | | | | | | | protein 4 | |
| CYB5R1 | Cytochrome b5 reductase | 583.052 | | | | PTPRK | Protein tyrosine | 12.76 |
| | 1 | | | | | | phosphatase, | |
| | | | | | | | receptor type K | |
| | Enovido hydrologo 1 | 591 606 | | | | | Corino nontidago | 12.60 |
| EPHAI | Epoxide hydrolase 1 | 000.100 | | | | SPINT | Senne pepudase | 12.09 |
| | | | | | | | inhibitor, Kunitz | |
| | | | | | | | type 1 | |
| NDUFV1 | NADH dehydrogenase | 558.186 | | | | ROBO1 | Roundabout | 12.38 |
| | [ubiquinone] flavoprotein 1 | | | | | | Guidance | |
| | | | | | | | Recentor 1 | |
| | | | | | | | | |
| COX5A | Cytochrome c oxidase | 558.156 | | | | NIPSNAP1 | Nipsnap homolog | 9.31 |
| | subunit 5A | | | | | | 1 | |
| SOD2 | Superoxide dismutase 2 | 458.521 | | | | ITGA5 | Integrin subunit | 9.23 |
| | | | | | | | alpha 5 | |
| GRHPR | Glyoxylate | 440 284 | | | | | Integrin subunit | 8.62 |
| | | 440.204 | | | | 110/10 | integrini Suburit | 0.02 |
| | reductase/hydroxypyruvate | | | | | | alpha V | |
| | reductase | | | | | | | |
| SDHA | Succinate dehydrogenase | 393.879 | | | | GOT2 | Glutamate | 8.54 |
| | complex, subunit A | | | | | | oxaloacetate | |
| | | | | | | | transaminaso 2 | |
| | | | | | | | tiansaminase z | |
| CS | Citrate synthase | 381.161 | | | | ALCAM | Activated | 7.74 |
| | | | | | | | leukocyte cell | |
| | | | | | | | adhesion | |
| | | | | | | | molecule | |
| | Hudrovustoroid (17 beta) | 360 706 | | | | | Tubulin boto 2P | 77 |
| 1901/810 | mydroxysteroid (17-deta) | 309.190 | | | | IUDDZD, IUBBZA | Tubulin beta 2B | 1.1 |
| | dehydrogenase 10 | | | | | | class IIb; Tubulin | |
| | | | | | | | beta 2A class Ila | |
| 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |

| ETFB | Electron transfer | 332.828 | | PSAP | Prosaposin | 7.51 |
|---------|---------------------------|---------|--|---------|---------------|------|
| | flavoprotein subunit beta | | | | | |
| NDUFA10 | NADH dehydrogenase | 312.164 | | SLC27A1 | Fatty acid | 7.22 |
| | [ubiquinone] 1 alpha | | | | transporter 1 | |
| | subcomplex 10 | | | | | |

Figure 3 – source data 8. Top 25 genes and corresponding proteins that exhibited more than a 100-fold increase in plasma membrane association under OC conditions compared to ND conditions in MCF10A cells (left), and more than a 5-fold increase in MCF10AT1 (middle) and MCF10CA1a (right) cells, as identified by mass spectrometry. One ion transporter showing plasma membrane relocation under OC conditions in MCF10CA1a cells is highlighted in bold.