I tried to look at the genes expressed in the mesenchymal stem cells to see if there were specifically interesting genes. The results were disappointing.

Link to the gene names of the research paper:

<https://www.ebi.ac.uk/arrayexpress/files/A-GEOD-16686/A-GEOD-16686.adf.txt>

Below I provided a table with genes that might be interesting. I looked at a lot of them, however most of them didn’t have a clear function or correlation with other genes.

|  |  |  |
| --- | --- | --- |
| Code | Name gene | Info |
| NM\_198317 | KLHL17 | Plays a role in the brain 🡪 probably not interesting  <https://www.ncbi.nlm.nih.gov/gene/?term=NM_198317> |
| NM\_005101 | ISG15 | Stimulates a lot of processes. 0.97 co-expression with GBP1 which stimulates the change in celshape  <https://hb.flatironinstitute.org/gene/9636> |
| NM\_198576 | AGRN | Stimulates receptor clustering  <https://www.ncbi.nlm.nih.gov/gene/?term=NM_198576> |
| NM\_001146685 | TMEM88B | Transmembrane protein  <https://www.ncbi.nlm.nih.gov/gene/?term=NM_001146685> |
| NM\_022469 | GREM2 | Possibly interesting: this gene encodes a member of the BMP (bone morphogenic protein) antagonist family |
| NM\_033138 | CALD1 | Possibly interesting: plays an essential role in the regulation of smooth muscle and nonmuscle contraction  <https://www.ncbi.nlm.nih.gov/gene/?term=NM_033138> |
| NM\_014051 | TMEM14A | Contributes to a negative apoptosis regulation  <https://www.ncbi.nlm.nih.gov/gene/?term=NM_014051> |
| NM\_138569 | MLIP | Negative regulation on cardiac muscle hypertrophy (increase in volume) <https://www.ncbi.nlm.nih.gov/gene/?term=NM_138569> |
| NM\_207410 | GFRAL | In neurons important. Eg. Glial cell-derived neurotrophic factor receptor signaling pathway  <https://www.ncbi.nlm.nih.gov/gene/?term=NM_207410> |
| NM\_004282 | BAG2 | Negative effect on protein binding  <https://www.ncbi.nlm.nih.gov/gene/?term=NM_004282> |
| NM\_018064 | AKIRIN2 | Positive regulation of cell proliferation  <https://www.ncbi.nlm.nih.gov/gene/?term=NM_018064> |