**Supplementary Table 1.** Fold changes (AUC intensity) between sample groups for all proteins discussed in text. Fold changes less than 1 are displayed as negative reciprocals.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Protein | Aged Hip/Young Hip | Aged Underarm/Young Underarm | Aged Forearm/Young Forearm | Young Forearm/Young Underarm | Aged Forearm/Aged Underarm |
| COL1A1 | -1.73 | -1.68 | -2.19 | -1.08 | -1.41 |
| COL1A2 | -1.65 | -1.71 | -2.26 | -1.20 | -1.59 |
| COL2A1 | -24.05 | -3.09 | 1.08 | -1.69 | 1.97 |
| COL4A2 | -2.33 | -1.16 | 2.02 | 1.06 | 2.48 |
| COL5A2 | -4.14 | -1.79 | -1.68 | -1.67 | -1.56 |
| COL5A3 | -2.47 | -1.25 | 1.17 | -1.19 | 1.23 |
| COL6A5 | -2.55 | -1.07 | 8.28 | -12.19 | -1.38 |
| COL6A6 | -3.46 | 1.12 | 1.86 | -1.31 | 1.27 |
| COL7A1 | -4.74 | -2.22 | 1.49 | -3.35 | -1.01 |
| COL11A2 | -1.23 | N/A | -1.10 | 1.95 | 0.00 |
| COL17A1 | -5.43 | -1.85 | 1.71 | -3.67 | -1.16 |
| MATN2 | -3.72 | -1.79 | 1.70 | -1.63 | 1.86 |
| MATN4 | -8.00 | -7.86 | -6.89 | -3.83 | -3.36 |
| DPT | -2.79 | -1.69 | -1.89 | -1.93 | -2.16 |
| ELN | 6.46 | 2.11 | 1.16 | 1.08 | 1.02 |
| FBN1 | -1.78 | -1.07 | 1.25 | -1.82 | -1.35 |
| FBN2 | -5.28 | -1.46 | 1.75 | -3.51 | -1.38 |
| FBLN1 | -2.78 | -1.18 | 4.53 | -1.47 | 3.63 |
| FBLN2 | -1.30 | 1.04 | 2.11 | -1.50 | 1.36 |
| FBLN5 | -3.41 | -3.37 | -1.06 | -2.80 | 1.13 |
| FBLN7 | -1.82 | 1.92 | 2.86 | 1.35 | 2.02 |
| VTN | -1.63 | 2.12 | 6.87 | 1.08 | 3.51 |
| MFAP4 | -5.16 | -8.22 | 1.19 | -5.59 | 1.74 |
| FMOD | -9.48 | -2.60 | -4.06 | -1.09 | -1.70 |
| DCN | -2.37 | -1.74 | -1.84 | -1.75 | -1.84 |
| LUM | -2.73 | -1.44 | -1.78 | -1.85 | -2.28 |
| VCAN | -3.29 | -1.38 | 1.28 | -1.47 | 1.20 |
| PODN | -3.48 | 1.04 | -3.40 | 1.07 | -3.30 |
| OGN | -3.13 | -1.65 | -2.08 | -3.13 | -3.93 |
| PRELP | -4.00 | -2.67 | -2.18 | -1.72 | -1.40 |
| BGN | -3.03 | -1.93 | -1.58 | -2.77 | -2.27 |
| ASPN | -1.85 | 1.25 | -1.77 | -2.77 | -6.11 |
| LAMA2 | -3.27 | -2.24 | 1.03 | -1.32 | 1.75 |
| LAMA3 | -3.36 | -1.38 | 1.52 | -1.76 | 1.20 |
| LAMA4 | -3.05 | -1.75 | 1.33 | -1.53 | 1.52 |
| LAMA5 | -3.27 | -1.20 | 1.27 | -1.38 | 1.11 |
| LAMB1 | -3.09 | -1.56 | 1.33 | -1.26 | 1.65 |
| LAMB2 | -3.65 | -1.35 | 1.60 | -1.41 | 1.53 |
| LAMB3 | -4.85 | -1.62 | 2.15 | -2.90 | 1.20 |
| LAMC1 | -2.67 | -1.45 | 1.65 | -1.42 | 1.68 |
| LAMC2 | -3.85 | -1.65 | 2.10 | -2.38 | 1.46 |
| NID1 | -3.96 | -1.68 | 1.69 | -2.16 | 1.32 |
| NID2 | -3.65 | -1.66 | 1.24 | -1.33 | 1.55 |
| HSPG2 | -3.56 | -1.56 | 1.34 | -1.27 | 1.65 |
| ECM1 | -2.42 | -1.55 | 2.73 | -3.17 | 1.34 |
| LOX | -3.99 | -3.51 | -3.66 | -1.02 | -1.07 |
| TGM1 | -1.89 | 1.19 | 3.27 | -3.02 | -1.10 |
| TGM3 | -4.48 | -1.09 | 1.88 | -2.67 | -1.30 |
| TGM5 | -5.83 | 1.96 | 1.42 | 1.14 | -1.21 |
| MMP2 | -3.56 | -1.81 | -1.09 | -1.36 | 1.22 |
| CTSV | -14.31 | -1.54 | 1.30 | -3.38 | -1.68 |
| CTSB | -7.55 | -1.93 | 1.30 | -2.07 | 1.21 |
| CTSC | -7.38 | 1.03 | 3.24 | -3.15 | -1.01 |
| CTSH | -7.49 | -1.55 | 1.51 | -3.82 | -1.64 |
| CTSD | -3.52 | -1.81 | 1.17 | -2.77 | -1.30 |
| CTSZ | -2.64 | -1.14 | 1.41 | -2.35 | -1.46 |
| HTRA1 | 1.44 | 10.06 | 3.45 | 8.78 | 3.01 |
| HTRA3 | N/A | 0.00 | 0.00 | -12.43 | 3.95 |
| TIMP3 | 14.90 | 10.07 | 11.72 | 1.29 | 1.50 |
| SLPI | 4.02 | 6.15 | 5.33 | 1.60 | 1.38 |
| SERPING1 | -2.74 | -1.07 | 1.59 | -2.78 | -1.63 |
| SERPINA6 | -2.54 | -1.34 | -1.06 | -2.53 | -2.00 |
| SERPINC1 | -4.00 | -1.53 | 1.27 | -2.31 | -1.20 |
| SERPINF2 | -3.62 | -1.91 | 1.19 | -2.99 | -1.32 |
| SERPINB2 | -4.75 | -1.86 | 23.56 | -93.05 | -2.12 |
| PLA2G2A | 8.73 | 4.80 | 4.46 | 2.19 | 2.03 |
| CLU | -1.66 | 1.64 | 10.14 | -1.50 | 4.13 |
| WISP2 | 1.30 | 6.96 | 4.24 | 3.08 | 1.88 |
| KRT34 | -159.72 | -3.46 | -7.44 | 8.29 | 3.86 |
| KRT75 | -38.06 | -1.84 | -7.25 | 8.41 | 2.14 |
| KRT83 | -3.41 | 1.02 | 2.44 | -2.66 | -1.11 |
| KRT85 | -19.93 | -3.33 | -6.32 | 4.19 | 2.21 |
| KRTAP2-3 | -87.77 | -12.79 | -7.55 | 3.58 | 6.07 |
| KRTAP3-1 | -76.22 | -7.47 | -8.62 | 6.80 | 5.89 |