**S1 Table.** **List of identified proteins from tryptic digests of skin samples by LC-MS/MS (A) and type III collagen content in CypB KO skin collagen (B).**

**A**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| WT-1 |  |  |  |  |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 98.03 | 71.4 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 76.75 | 74.9 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 40.05 | 60.9 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
| 4 | 2.19 | 9.3 | sp|P63260|ACTG\_MOUSE | Actin, cytoplasmic 2 |
| 5 | 2.1 | 73.8 | sp|P62806|H4\_MOUSE | Histone H4 |
|   |   |   |   |   |
| WT-2 |   |   |   |   |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 91.6 | 75.7 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 73.66 | 74.4 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 38.54 | 63 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
|   |   |   |   |   |
| WT-3 |   |   |   |   |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 99.75 | 76.7 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 82.84 | 78.6 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 33.34 | 59.9 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
|   |   |   |   |   |
| Het-1 |   |   |   |   |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 101.85 | 79.2 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 79.73 | 80 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 35.41 | 63.4 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
| 4 | 2.04 | 43.7 | sp|Q8CGP0|H2B3B\_MOUSE | Histone H2B type 3-B |
|   |   |   |   |   |
| Het-2 |   |   |   |   |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 103.32 | 77.4 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 82.28 | 80.5 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 35.08 | 63.1 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
| 4 | 2.07 | 56.4 | sp|Q8CGP1|H2B1K\_MOUSE | Histone H2B type 1-K |
|   |   |   |   |   |
| Het-3 |   |   |   |   |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 92.38 | 73.9 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 74.41 | 79.6 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 35.17 | 63.4 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
| 4 | 0.85 | 65.9 | sp|Q8CGP0|H2B3B\_MOUSE | Histone H2B type 3-B |
|   |   |   |   |   |
| KO-1 |   |   |   |   |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 91.9 | 72.3 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 75.84 | 76.9 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 44.07 | 61.4 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
| 4 | 2.77 | 14.6 | sp|P68134|ACTS\_MOUSE | Actin, alpha skeletal muscle |
|   |   |   |   |   |
| KO-2 |   |   |   |   |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 96.84 | 74.4 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 81.71 | 76.4 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 37.58 | 62.7 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
| 4 | 1.74 | 11.2 | sp|P63260|ACTG\_MOUSE | Actin, cytoplasmic 2 |
| 5 | 1.1 | 55.3 | sp|P62806|H4\_MOUSE | Histone H4 |
| 6 | 0.72 | 21.1 | sp|P02104|HBE\_MOUSE | Hemoglobin subunit epsilon-Y2 |
|   |   |   |   |   |
| KO-3 |   |   |   |   |
| N | Score | Coverage (%) | Accession number | Protein |
| 1 | 88.65 | 74 | sp|P11087|CO1A1\_MOUSE | Collagen alpha-1(I) chain |
| 2 | 76.09 | 75.1 | sp|Q01149|CO1A2\_MOUSE | Collagen alpha-2(I) chain |
| 3 | 38.98 | 57.1 | sp|P08121|CO3A1\_MOUSE | Collagen alpha-1(III) chain |
| 4 | 2.94 | 13.6 | sp|P63260|ACTG\_MOUSE | Actin, cytoplasmic 2 |
| 5 | 2 | 25.9 | sp|P02089|HBB2\_MOUSE | Hemoglobin subunit beta-2 |
| 6 | 1.54 | 82.5 | sp|Q8CGP0|H2B3B\_MOUSE | Histone H2B type 3-B |

**B**

|  |  |
| --- | --- |
|  | Type III collagen content |
|   | % |   | (S.D.) |
| WT | 14.2 |  | (2.6) |
| Het | 15.0 |  | (1.0) |
| KO | 13.9 |   | (1.0) |

No significant difference (p>0.05) between KO and WT/Het. S.D., standard deviation; WT, wild type; Het, heterozygous; KO, knock-out. (n=3)