**Supplementary Materials**
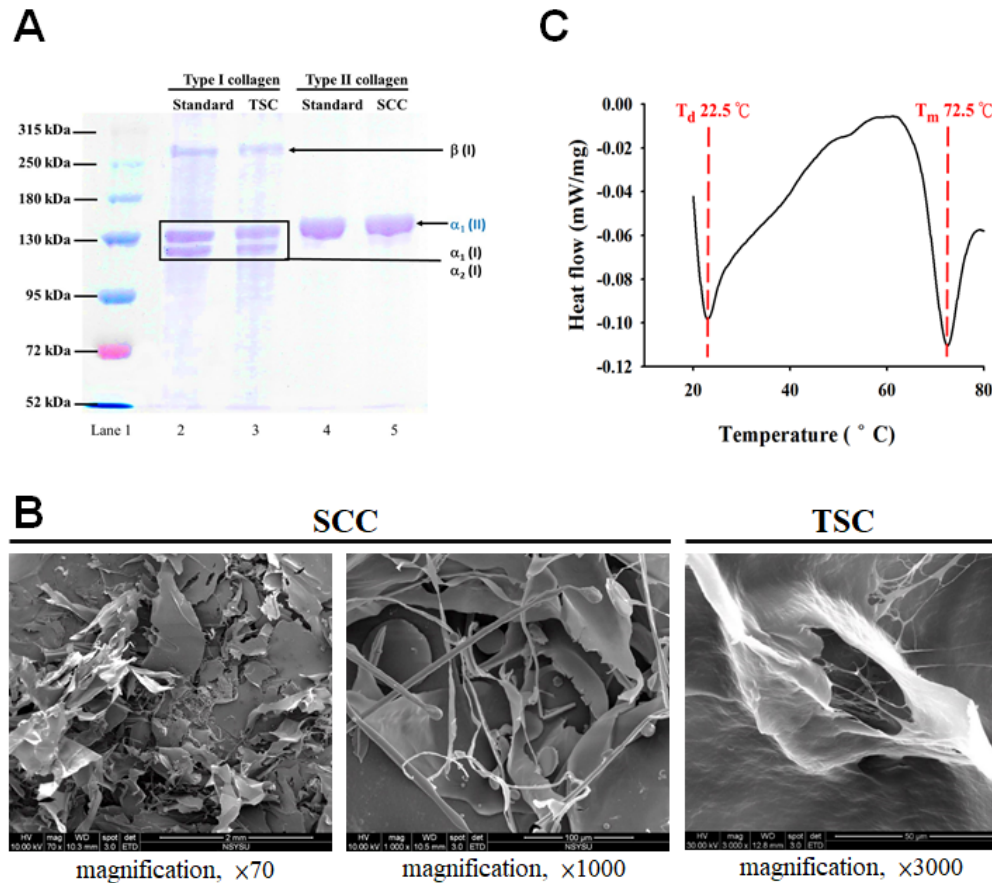
**Type II Collagen from Cartilage of *Acipenser baerii* Promotes Wound Healing in Human Dermal Fibroblasts and in Mouse Skin**

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**Figure S1.** SDS-PAGE pattern and SEM images of collagen from the cartilage of *Acipenser baerii* (SCC). **(A)** Lane 1, molecular weight marker; lane 2, type I collagen standard from rat tail; lane 3, TSC; lane 4, type II collagen standard from chicken sternal cartilage and lane 5, SCC. **(B)** SEM images of lyophilized SCC and TSC. **(C)** DSC thermograms of SCC. X axis, temperature in °C; Y axis, heat flow.

**Table S1. Proximate compositions of cartilage from *Acipenser baerii***

| Composition | Dry weight (%) |
| --- | --- |
| Crude protein[a] | 61.7 ± 0.66 |
| Crude fat | 6.39 ± 1.87 |
| Ash | 9.32 ± 1.21 |
| Carbohydrates | 21.7 ± 1.04 |
| Total | 99.15 |

All values represent the mean of three replicates ± standard deviation.

[a] % protein = %total nitrogen × 5.95

[b] % Carbohydrate calculated by difference

**Table S2. Collagen yield of cartilage from *Acipenser baerii***

| Characteristics | |
|---|---|
| Hydroxyproline (mg/g) | 28.71 ± 0.48 |
| Collagen (%)[a] | 28.77 ± 0.48 |
| Yield (%)[b] | 20.11 ± 0.44 |
| Extraction (%)[c] | 69.92 ± 1.53 |

[a] The collagen content was obtained from hydroxyproline content with a factor of 10.02, which was calculated from the present result of amino acid profile (Table S3).

[b] Yield (%) = weight of lyophilized sample (g) / total solid weight of initial cartilage (g) × 100%

[c] Extraction (%) = yield /collagen × 100%

**Table S3. Amino acid profile of SCC and tilapia skin collagen (TSC)**

| Amino acid | SCC | TSC |
|---|---|---|
| Gly | 345.30 | 351.84 |
| Pro | 113.63 | 121.33 |
| Hyp | 99.79 | 98.60 |
| Glu | 92.24 | 64.09 |
| Ala | 89.38 | 128.01 |
| Arg[a] | 45.64 | 51.95 |
| Asp | 44.64 | 36.45 |
| Ser | 36.39 | 32.06 |
| Leu[a] | 32.22 | 19.88 |
| Phe[a] | 25.43 | 15.43 |
| Thr[a] | 22.20 | 24.76 |
| Val[a] | 16.40 | 15.31 |
| Lys[a] | 13.54 | 22.78 |
| Ile[a] | 11.69 | 7.33 |
| Met[a] | 7.33 | 8.18 |
| Tyr | 3.18 | 0.91 |
| Cys | 1.00 | 1.08 |
| His[a] | - | - |
| Total | 1000.00 | 1000.00 |
| Imino acid[b] | 213.42 | 219.93 |

[a] Essential amino acids

[b] Imino acids, include proline and hydroxyproline

**Table S4. List of primers used for qRT-PCR analysis**

| Gene (human) | Primer sequence |
|---|---|
| Snail | F-TCGGAAGCCTAACTACAGCGA<br>R-AGATGAGCATTGGCAGCGAG |
| MMP1 | F-AAAATTACACGCCAGATTTGCC<br>R-GGTGTGACATTACTCCAGAGTTG |
| N-cadherin | F-TCAGGCGTCTGTAGAGGCTT<br>R-ATGCACATCCTTCGATAAGACTG |
| Has2 | F-CTCTTTTGGACTGTATGGTGCC<br>R-AGGGTAGGTTAGCCTTTTCACA |
| Collagen Iα1 | F-GAGGGCCAAGACGAAGACATC<br>R-CAGATCACGTCATCGCACAAC |
| Collagen IIIα1 | F-GGAGCTGGCTACTTCTCGC<br>R-GGGAACATCCTCCTTCAACAG |
| Elastin | F-GCAGGAGTTAAGCCCAAGG<br>R-TGTAGGGCAGTCCATAGCCA |
| GAPDH | F-TGTGGGCATCAATGGATTTGG<br>R-ACACCATGTATTCCGGGTCAAT |