

Tables.

Table 1. Up-regulation of genes associated with wound induced keratins.

Probe name	Description	Gene symbol	Fold change
Keratins			
1422784_at	keratin 6A	<i>Krt6a</i>	14.6901
1423227_at	keratin 17	<i>Krt17</i>	7.9747
1424096_at	keratin 5	<i>Krt5</i>	7.3153
1423935_x_at	keratin 14	<i>Krt14</i>	8.1810

Fold change: BSL/SH normalized intensity ratio.

Table 2. Alteration of genes associated with extracellular matrix.

Probe name	Description	Gene symbol	Fold change
Collagen			
1455494_at	collagen, type I, alpha 1	<i>Colla1</i>	2.5030
1423110_at	collagen, type I, alpha 2	<i>Colla2</i>	2.6747
1427884_at	collagen, type III, alpha 1	<i>Col3a1</i>	3.4892
1418799_a_at	collagen, type XVII, alpha 1	<i>Col17a1</i>	2.4751
Tight junction			
1437932_a_at	claudin 1	<i>Cldn1</i>	2.1909
1434651_a_at	claudin 3	<i>Cldn3</i>	2.0510
Adherens junction			
1448261_at	cadherin 1	<i>Cdh1</i>	2.2079
Desmosome			
1435494_s_at	desmoplakin	<i>Dsp</i>	4.6570
1434534_at	desmocollin 3	<i>Dsc3</i>	2.1909
Gap junction			
1415801_at	gap junction protein, alpha 1	<i>Gja1</i>	-0.39884

Fold change: BSL/SH normalized intensity ratio.

Table 3. Alteration of genes associated with migration.

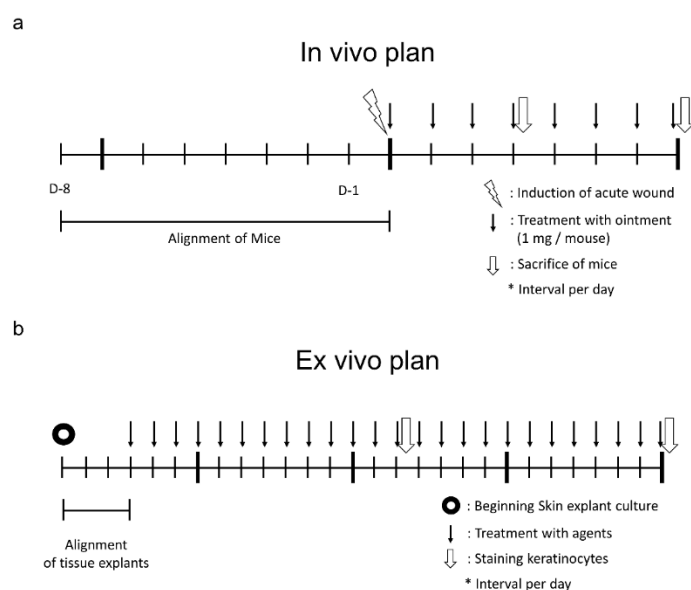
Probe name	Description	Gene symbol	Fold change
Oncogene			
1423240_at	Rous sarcoma oncogene	<i>Src</i>	2.1337
Integrin linked kinases			
1449942_a_at	integrin linked kinase	<i>Ilk</i>	2.0405
Chemokine ligand			
1417574_at	chemokine (C-X-C motif) ligand 12	<i>Cxcl12</i>	3.078
Fibroblast growth factor			

1422916_at	fibroblast growth factor 21	<i>Fgf21</i>	2.0611
A disintegrin and metallopeptidase			
1450105_at	a disintegrin and metallopeptidase domain 10	<i>Adam10</i>	-0.2529
1421857_at	a disintegrin and metallopeptidase domain 17	<i>Adam17</i>	-0.1847
Wnt signaling			
1448818_at	wingless-related MMTV integration site 5A	<i>Wnt5a</i>	-0.4180
1430533_a_at	catenin (cadherin associated protein), beta 1	<i>Ctnnb1</i>	-0.0786

Fold change: BSL/SH normalized intensity ratio.

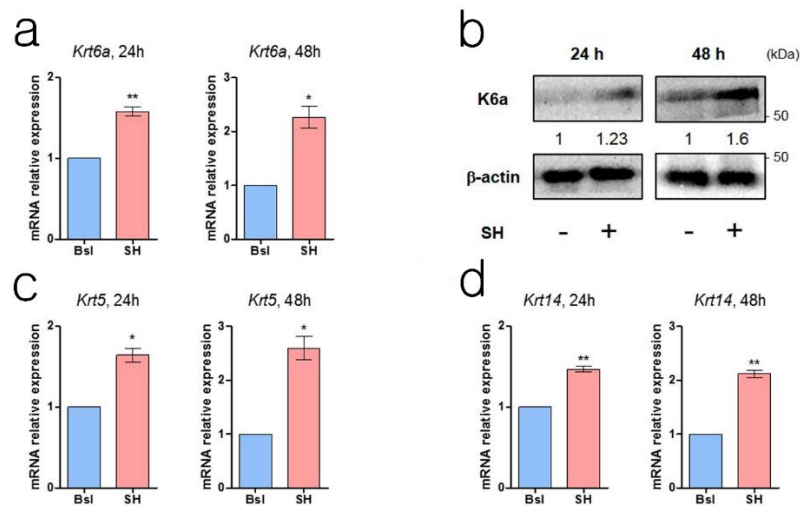
Supplementary figures.

Supplementary Fig. 1



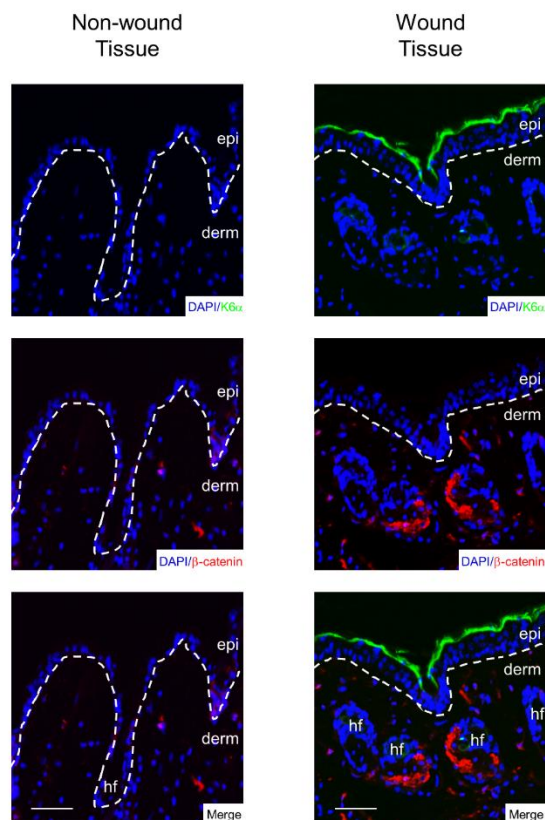
Supplementary Fig. 1. Plan of *in vivo* and *ex vivo*. (a) The schematic timeline of *in vivo* work was exhibited. During 7 days, we observed wound closure of mice back skin after post-wounding. (b) The schematic timeline of *ex vivo* work was represented. During 24 days, we observed and cultured skin explants, derived from mice back skin (P0). After 12 day or 24 days, we stained migrated cells, derived from skin explants using H&E solution.

Supplementary Fig. 2



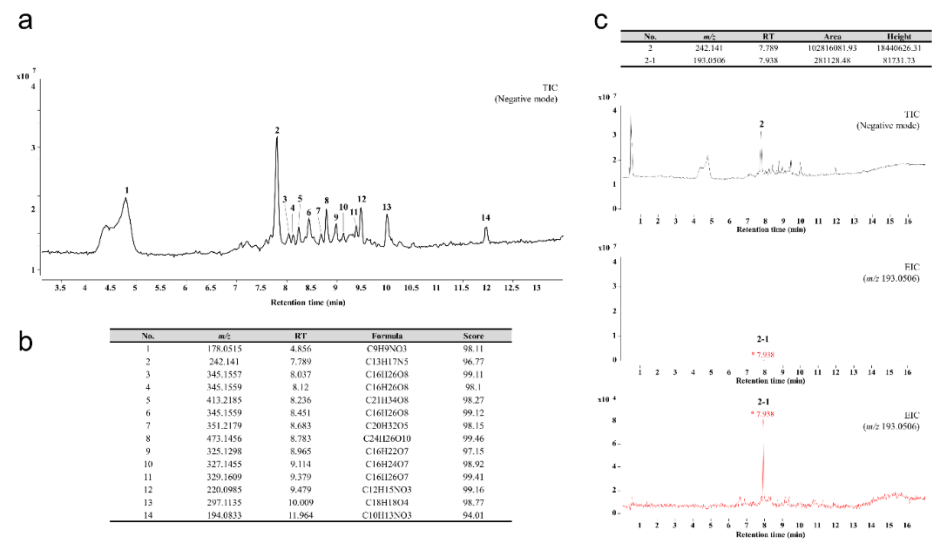
Supplementary Fig. 2. Transcriptomic analysis of keratins in primary keratinocytes. (a) In primary keratinocytes, mRNA of *Krt6a* was analyzed after treatment with SH. (b) Western blotting of Keratin 6 was induced after treatment with SH. (c) In primary keratinocytes, mRNA of *Krt5* was analyzed after treatment with SH. (d) In primary keratinocytes, mRNA of *Krt14* was analyzed after treatment with SH.

Supplementary Fig. 3



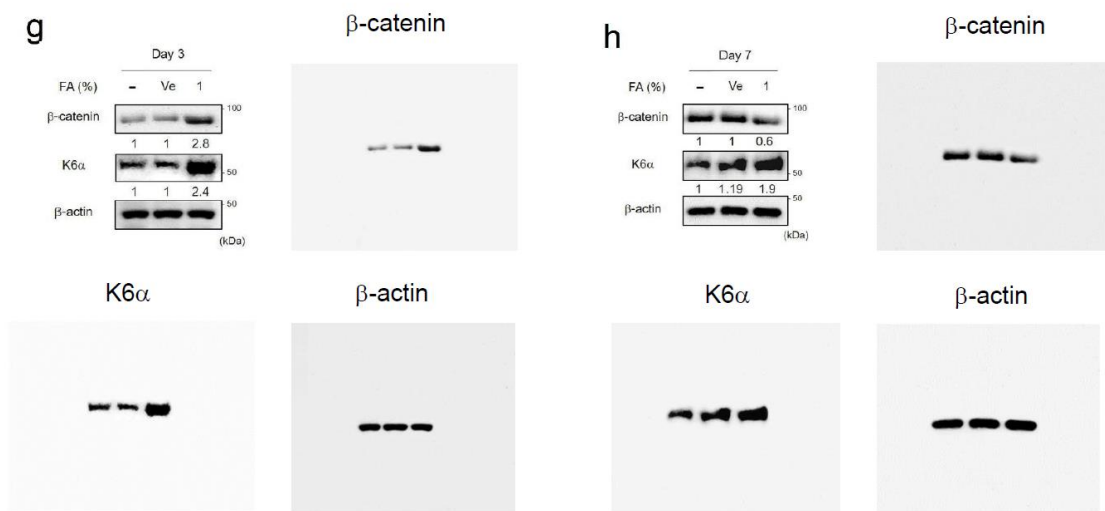
Supplementary Fig. 3. Immunofluorescence staining between non-wound and wound tissue. Between non-wound and wound tissue, we performed immunofluorescence staining of wound-induced keratin, K6α (wound marker, green) and β-catenin (red), associated with proliferation of fibroblasts on wound edge.

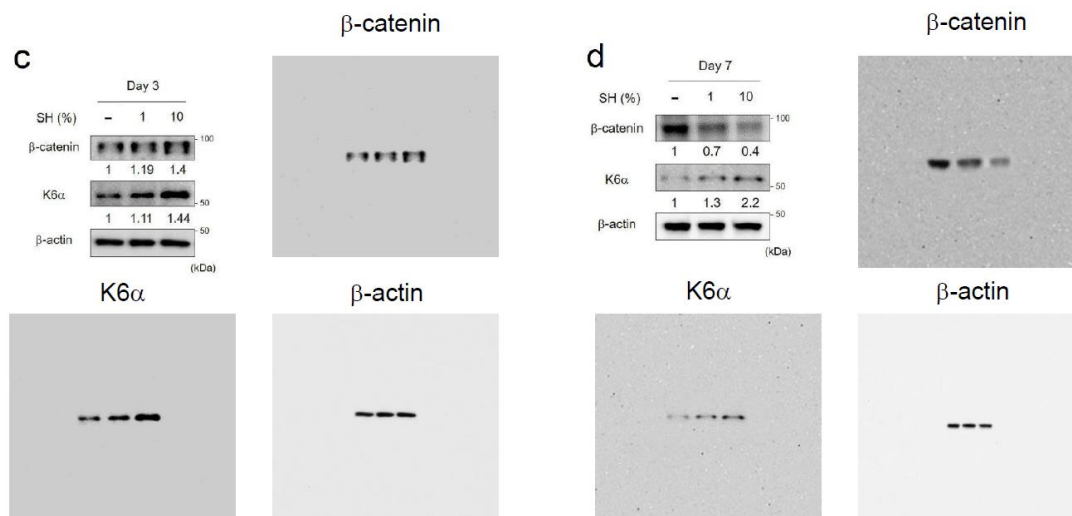
Supplementary Fig. 4



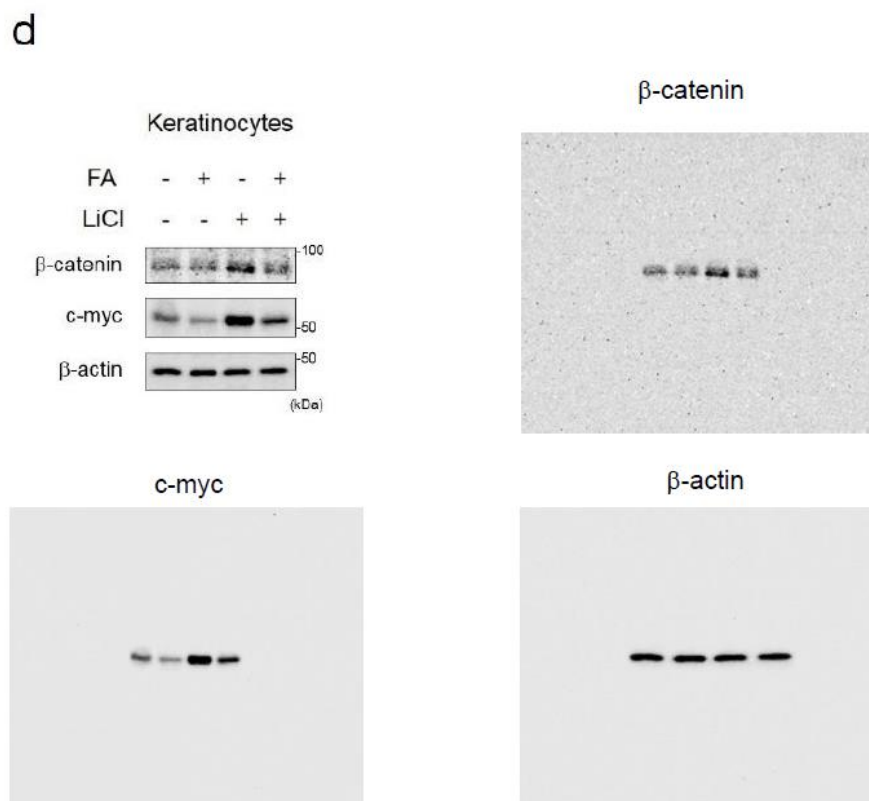
Supplementary Fig. 4. Total ion chromatogram of *shilajit* (a) Total ion chromatogram of *shilajit* extract by LC/MS analysis and chemicals. (b) The represented constituents were detected by *shilajit*. (c) The extracted chromatogram on 193. 0506.

Western blotting on Figure . 3

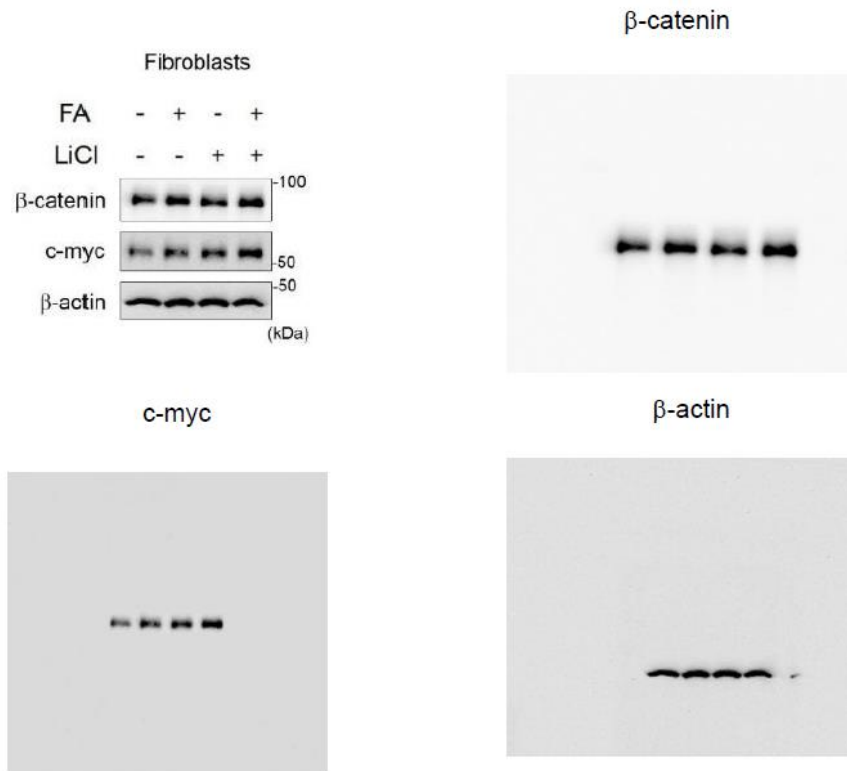




Western blotting on Figure . 4

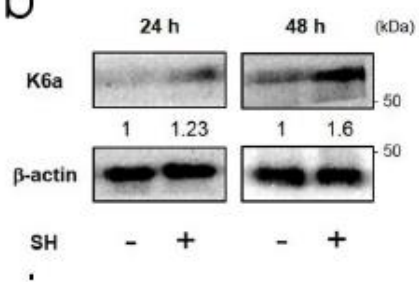


j



Western blotting on supplementary figure . 3

b



24h

K6 α

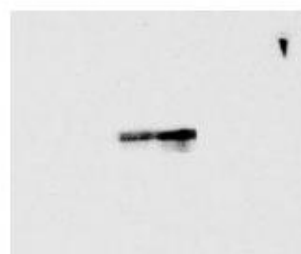


β -actin



48h

K6 α



β -actin

