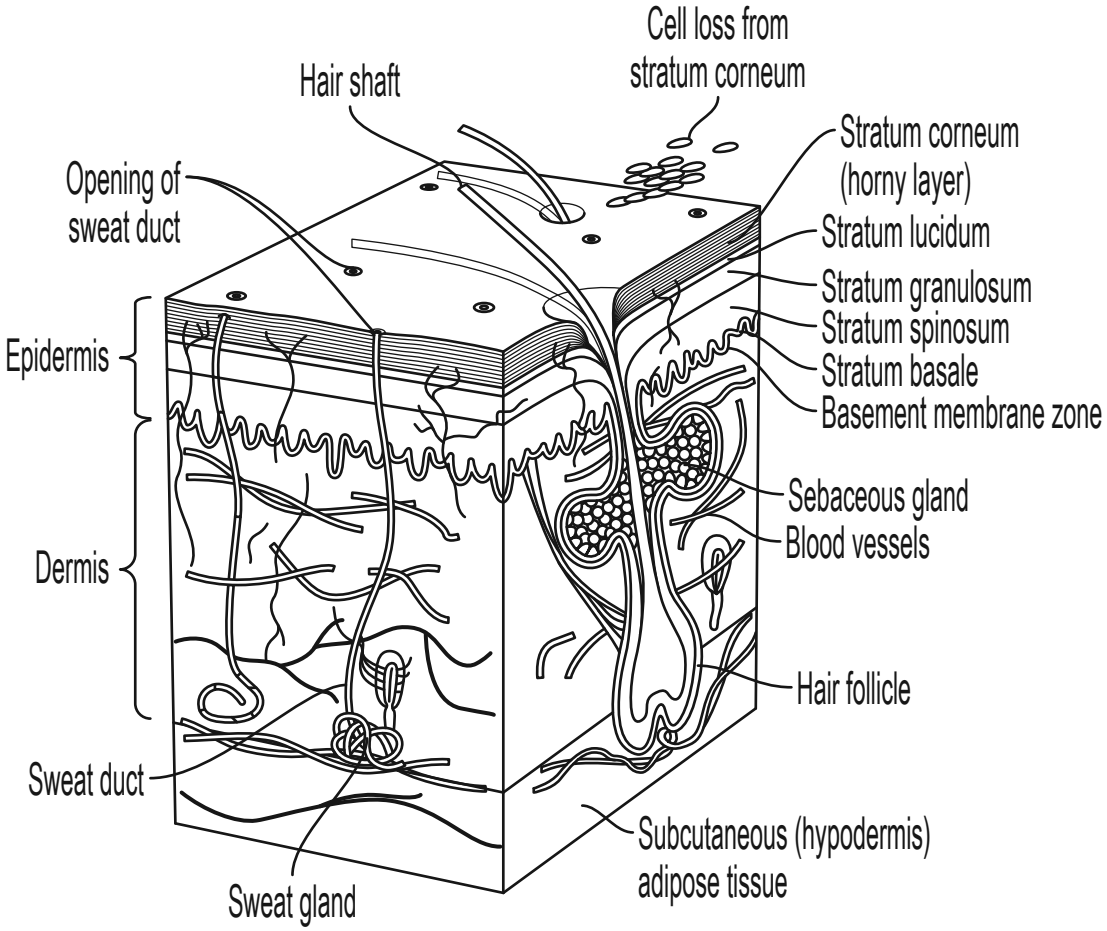
Cell loss from
stratum corneum
Hair shaft
Stratum corneum
(horny layer)
Opening of
sweat duct
Stratum lucidum
Stratum granulosum
Stratum spinosum
Epidermis
Stratum basale
Basement membrane zone
Sebaceous gland
Blood vessels
Dermis
Hair follicle
Sweat duct
Subcutaneous (hypodermis)
adipose tissue
Sweat gland

Figure 1

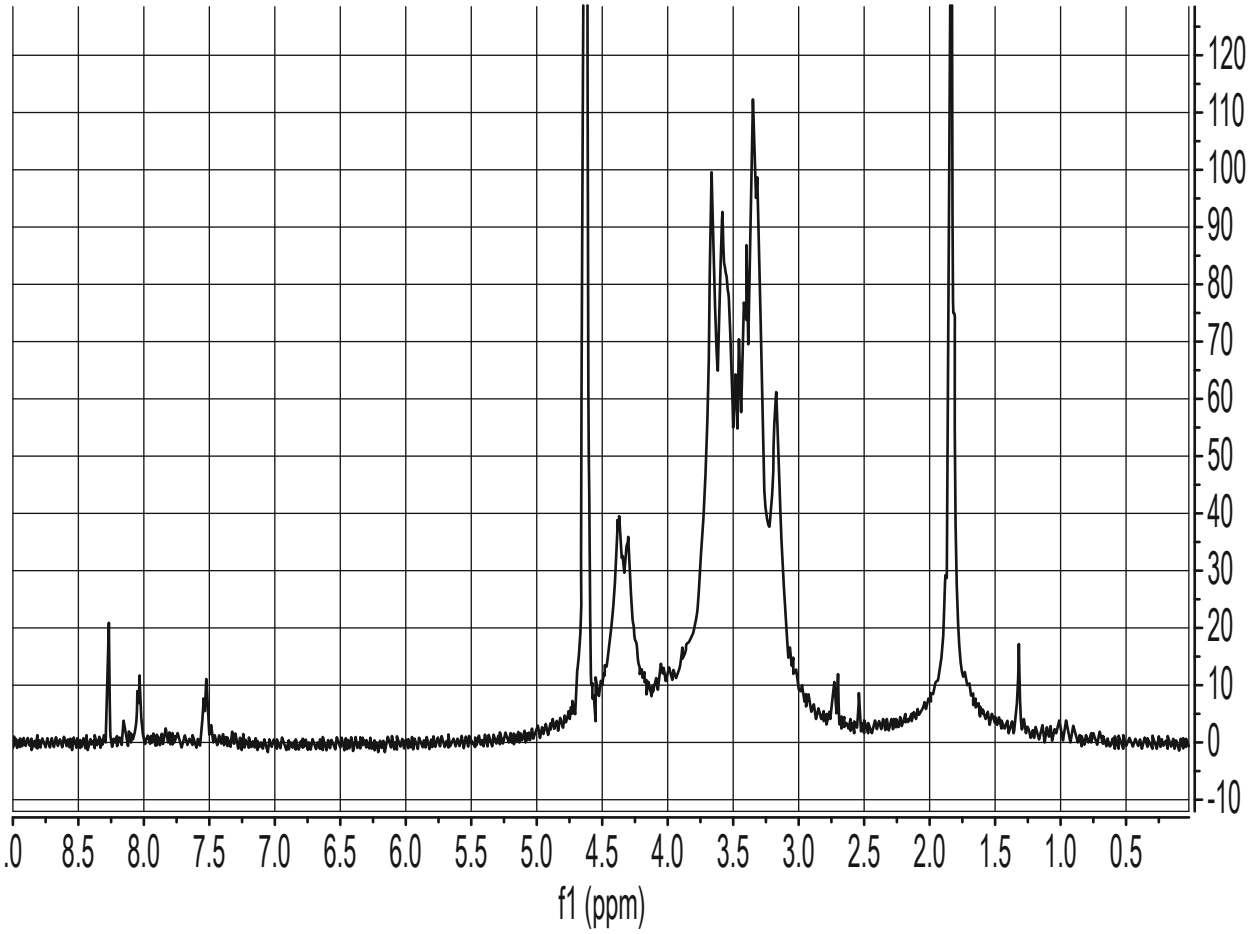
120
110
100
90
80
70
60
50
40
30
20
10
0
-10
.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5
f1 (ppm)

Figure 2

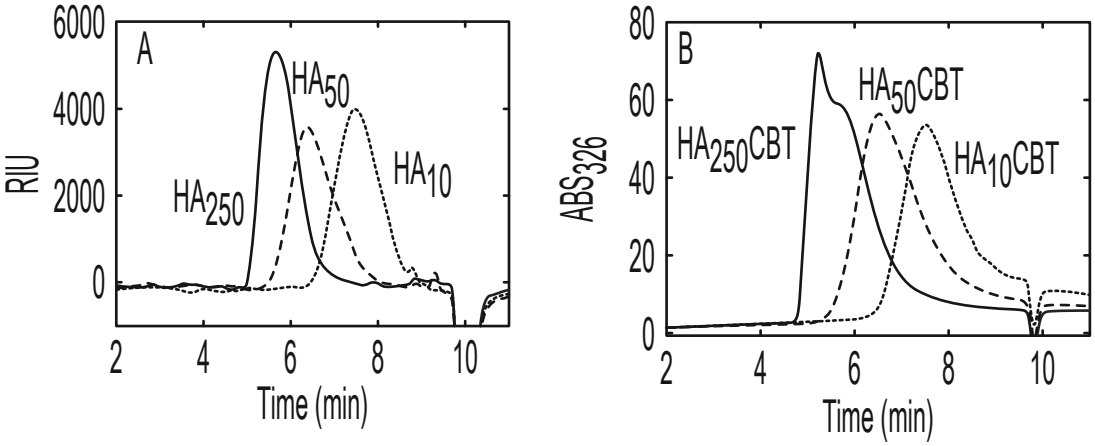
A
HA50
HA250
HA10
RIU
6000
4000
2000
0
2
4
6
8
10
Time (min)
B
HA50CBT
HA250CBT
HA10CBT
ABS326
80
60
40
20
0
2
4
6
8
10
Time (min)

Figure 3

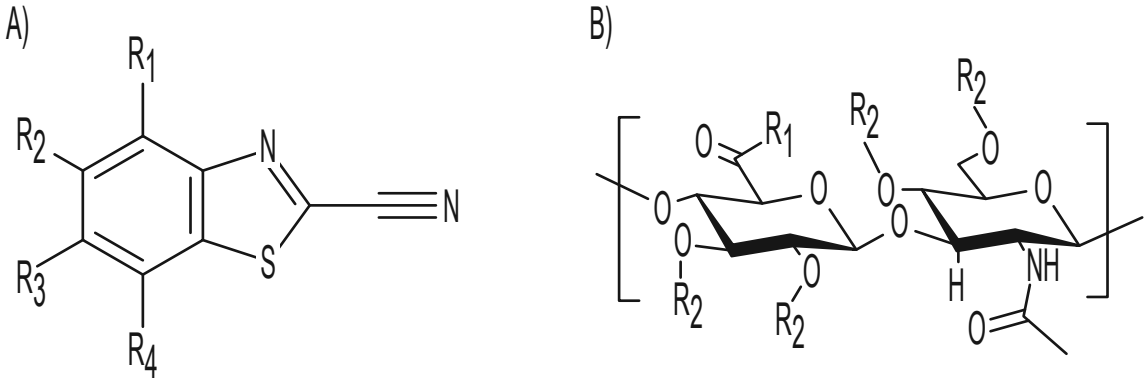

Figure 4

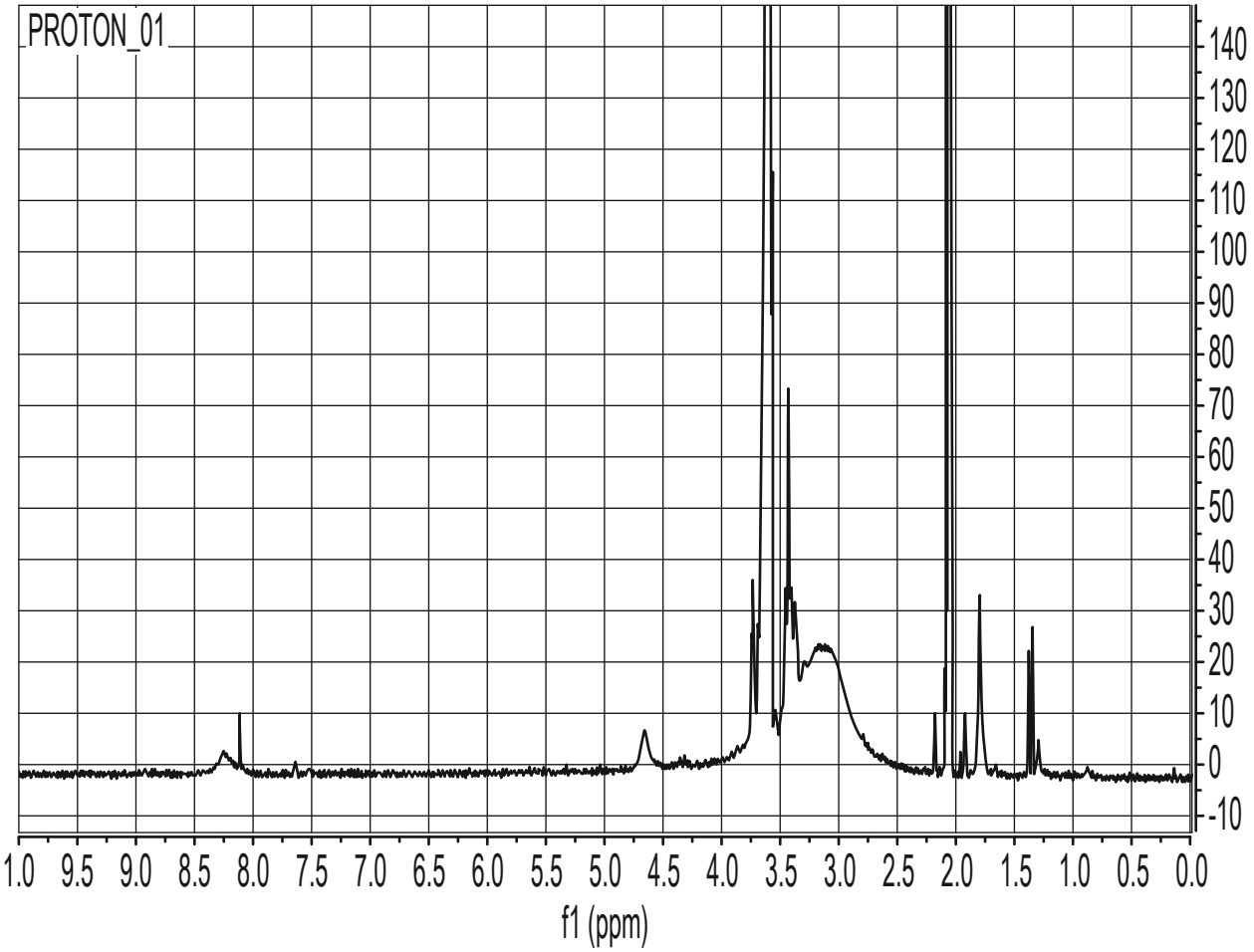
PROTON_01
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-10
1.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
f1 (ppm)

Figure 5

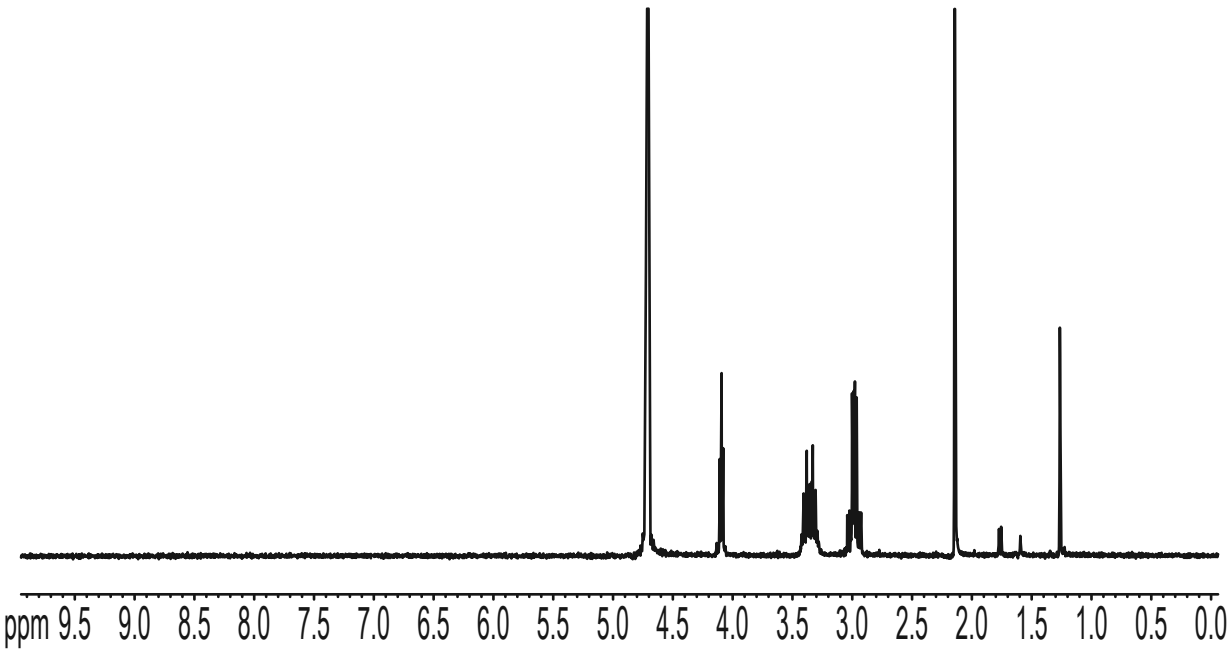

Figure 6

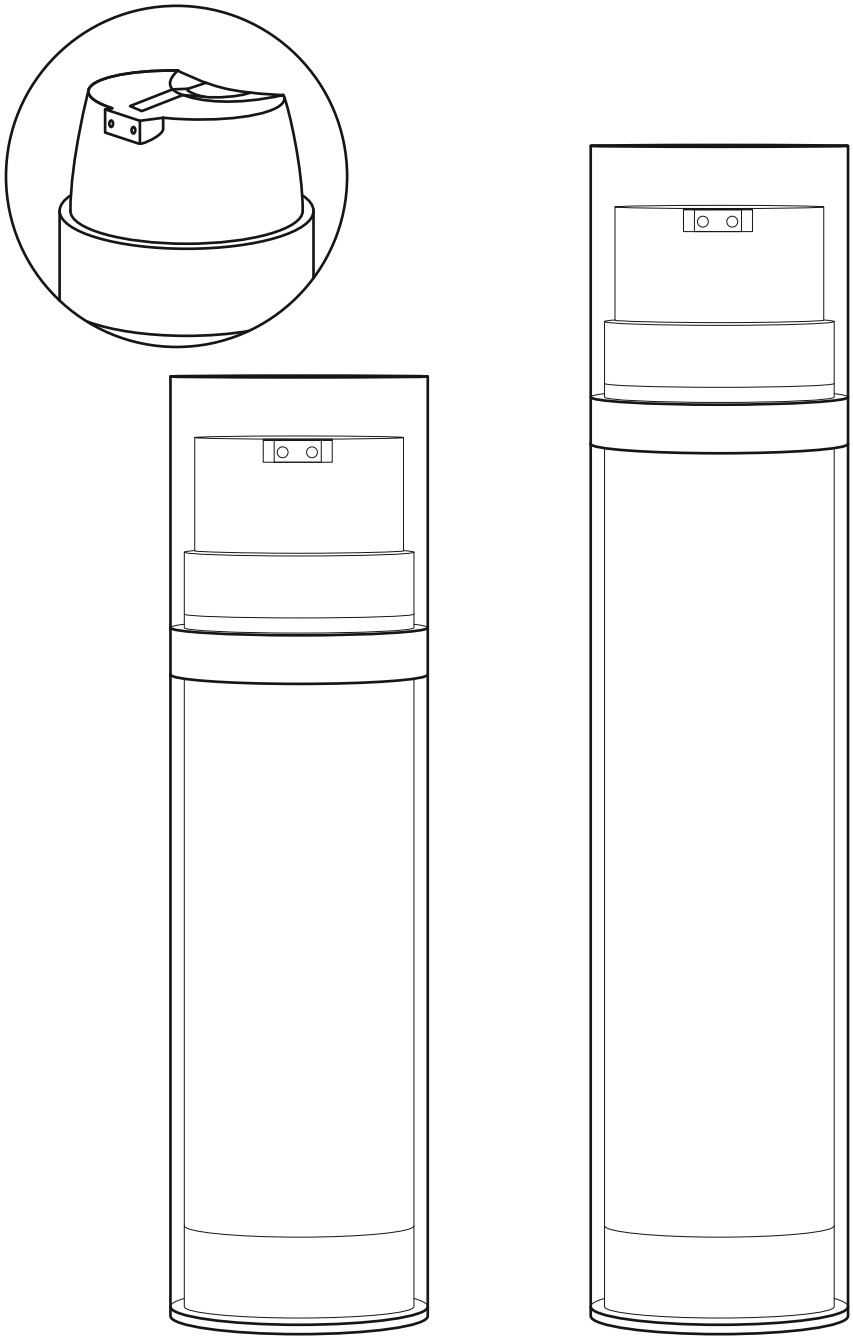

Figure 7

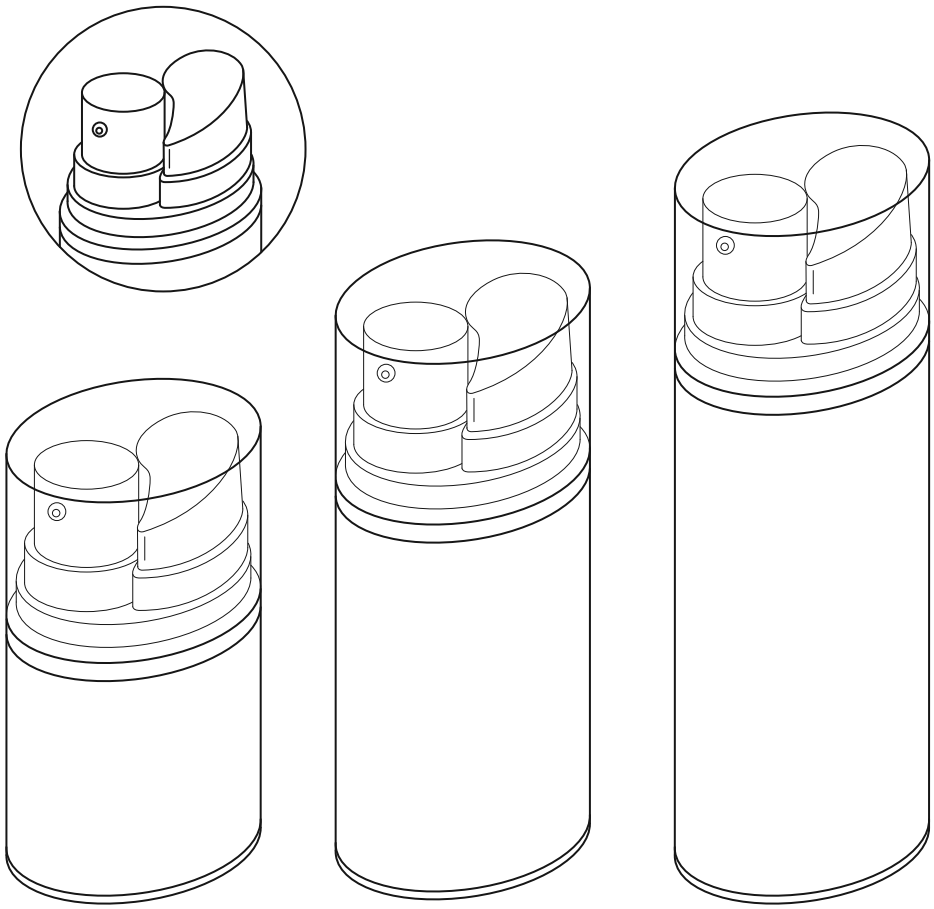

Figure 8

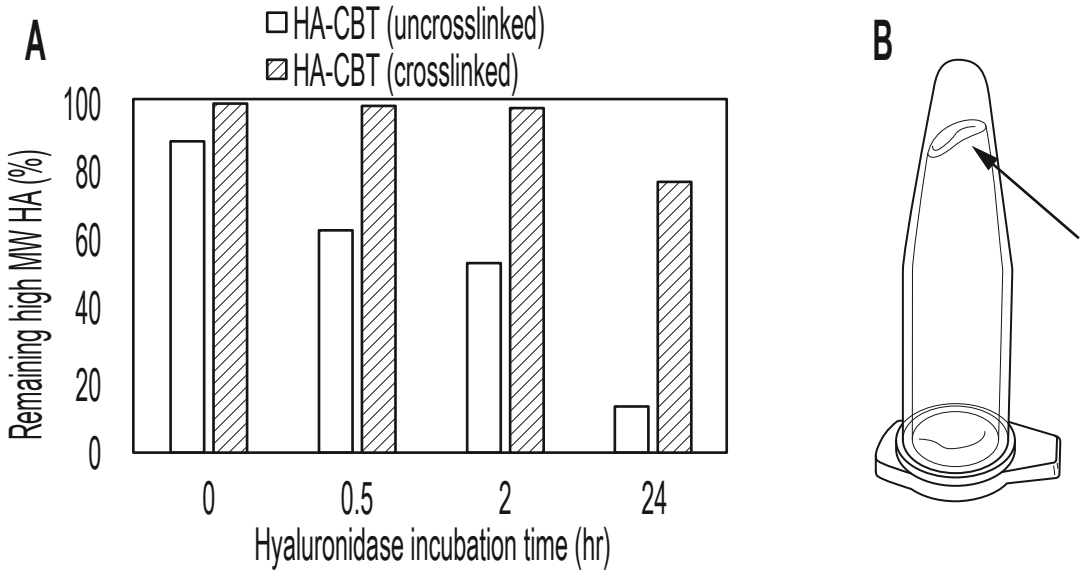
A
HA-CBT (uncrosslinked)
HA-CBT (crosslinked)
Remaining high MW HA (%)
100
80
60
40
20
0
0
0.5
2
24
Hyaluronidase incubation time (hr)
B

Figure 9

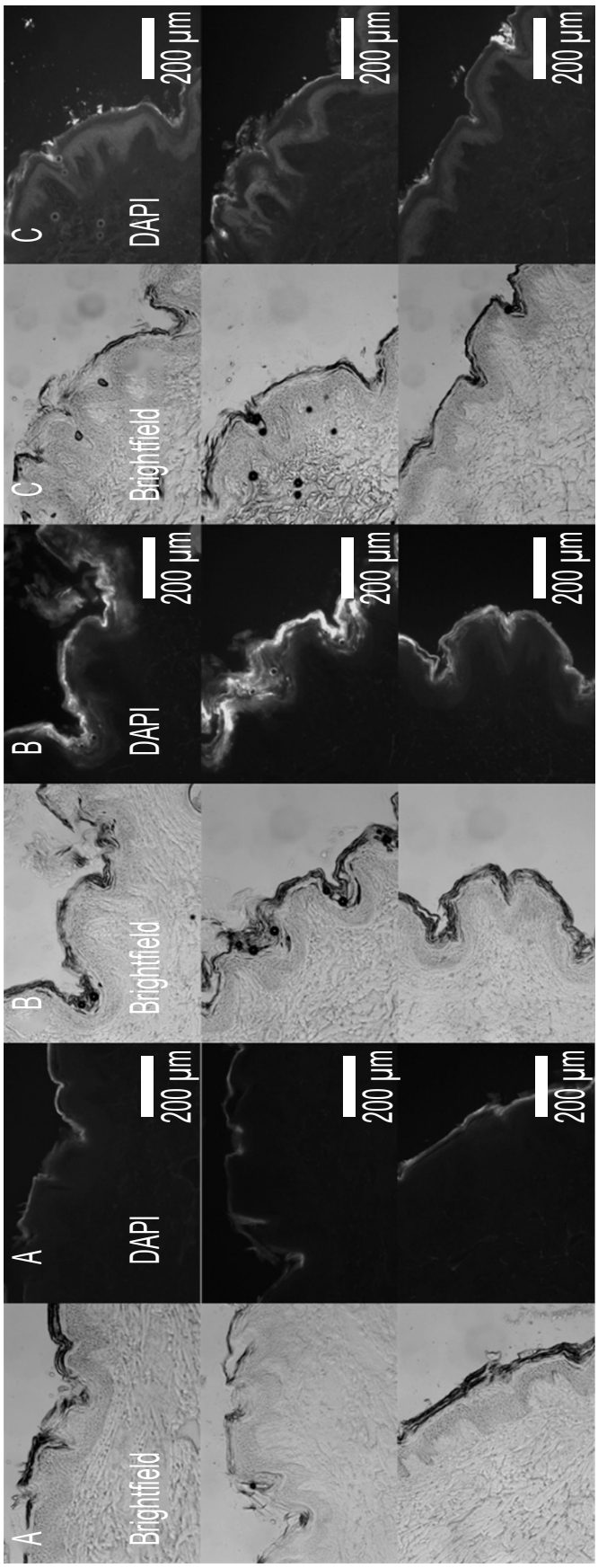
A
Brightfield
A
DAPI
200 µm
B
Brightfield
B
DAPI
200 µm
C
Brightfield
C
DAPI
200 µm

Figure 10

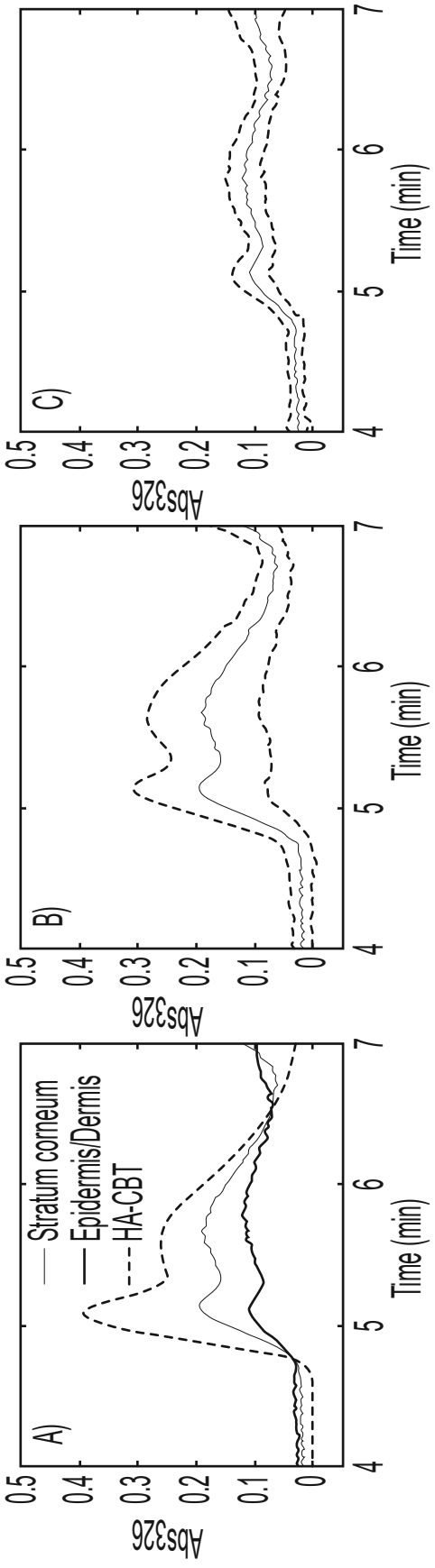
A)
B)
C)
Stratum corneum
Epidermis/Dermis
HA-CBT
Abs326
Time (min)
0
0.1
0.2
0.3
0.4
0.5
4
5
6
7

Figure 11

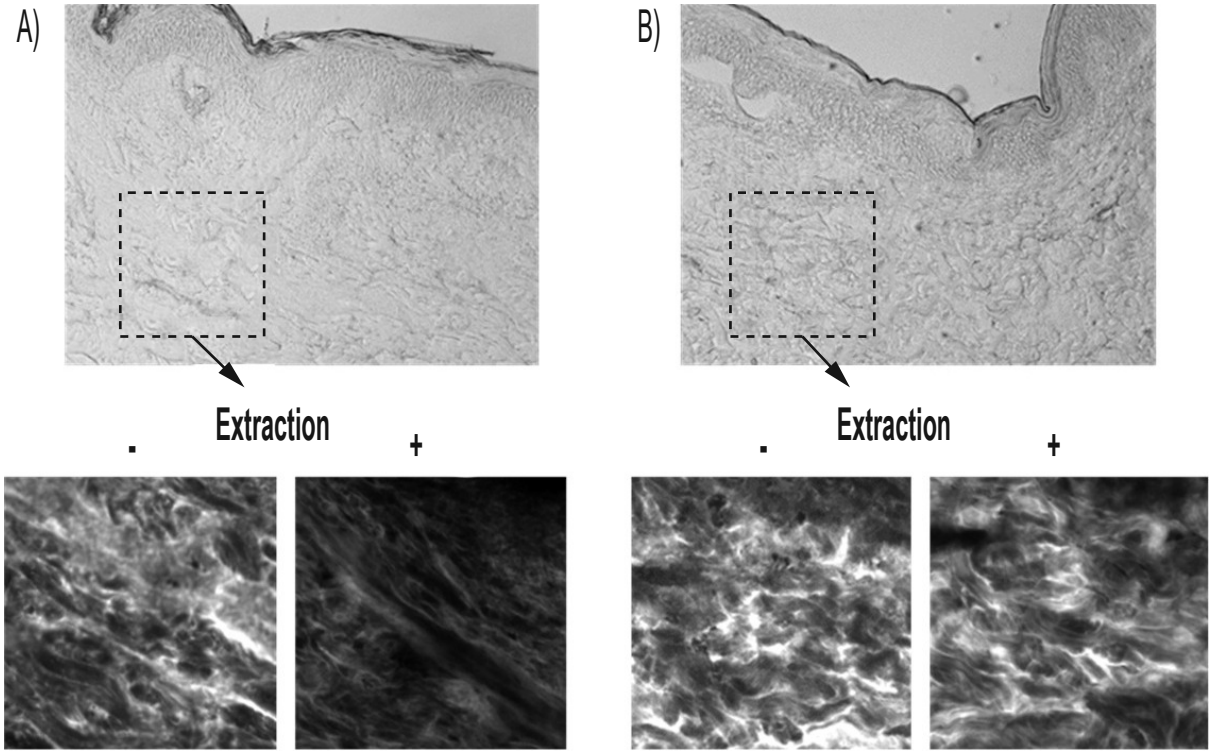

Figure 12

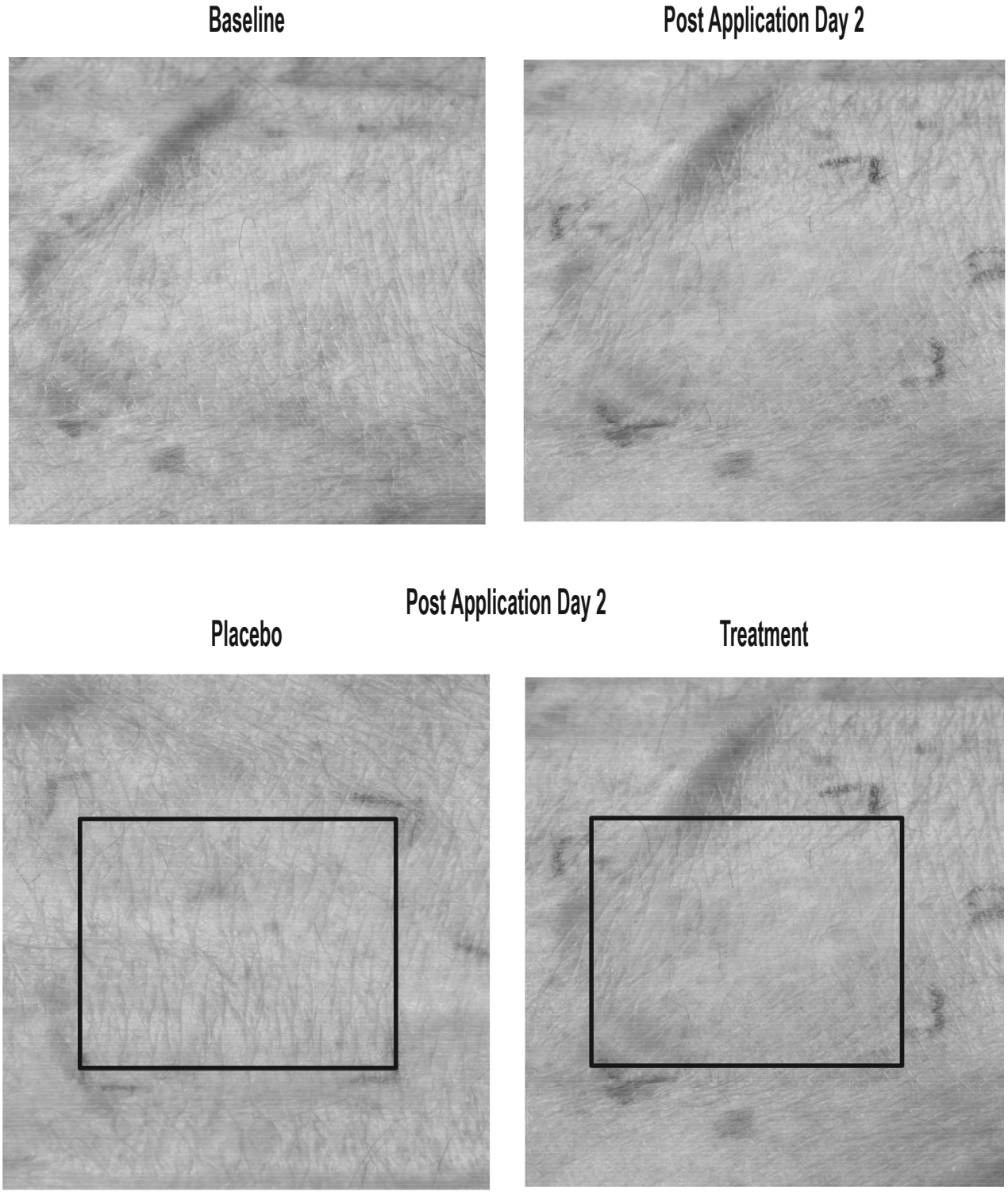
Baseline
Post Application Day 2
Post Application Day 2
Placebo
Treatment

Figure 13

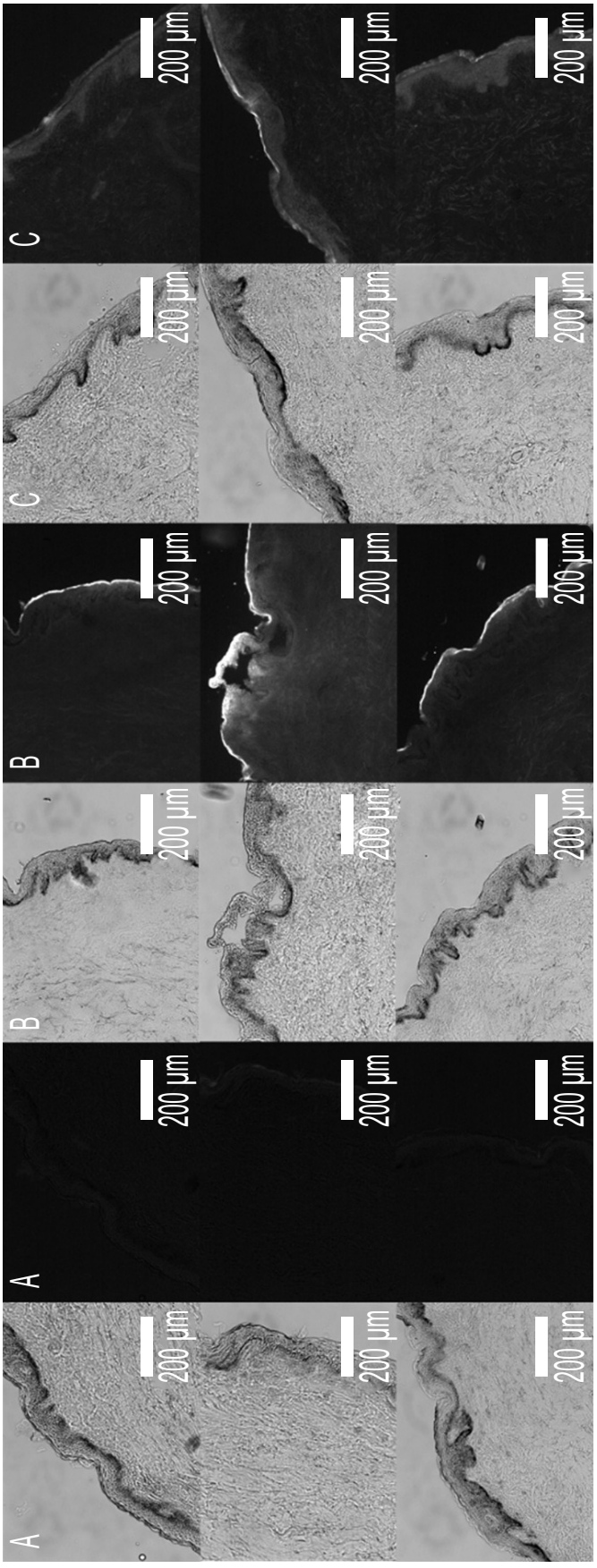

Figure 14

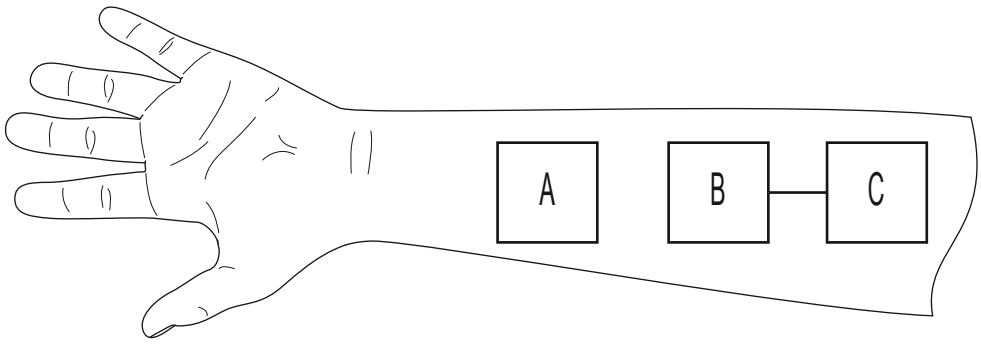

Figure 15

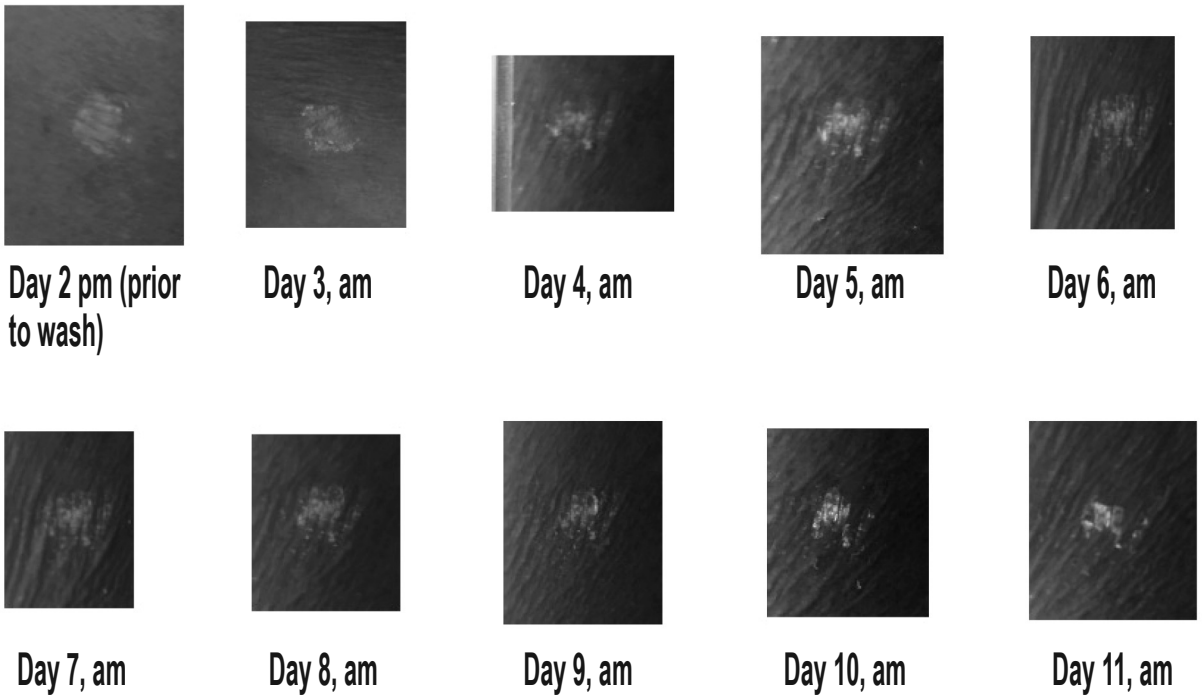
Day 2 pm (prior to wash)
Day 3, am
Day 4, am
Day 5, am
Day 6, am
Day 7, am
Day 8, am
Day 9, am
Day 10, am
Day 11, am

Figure 16

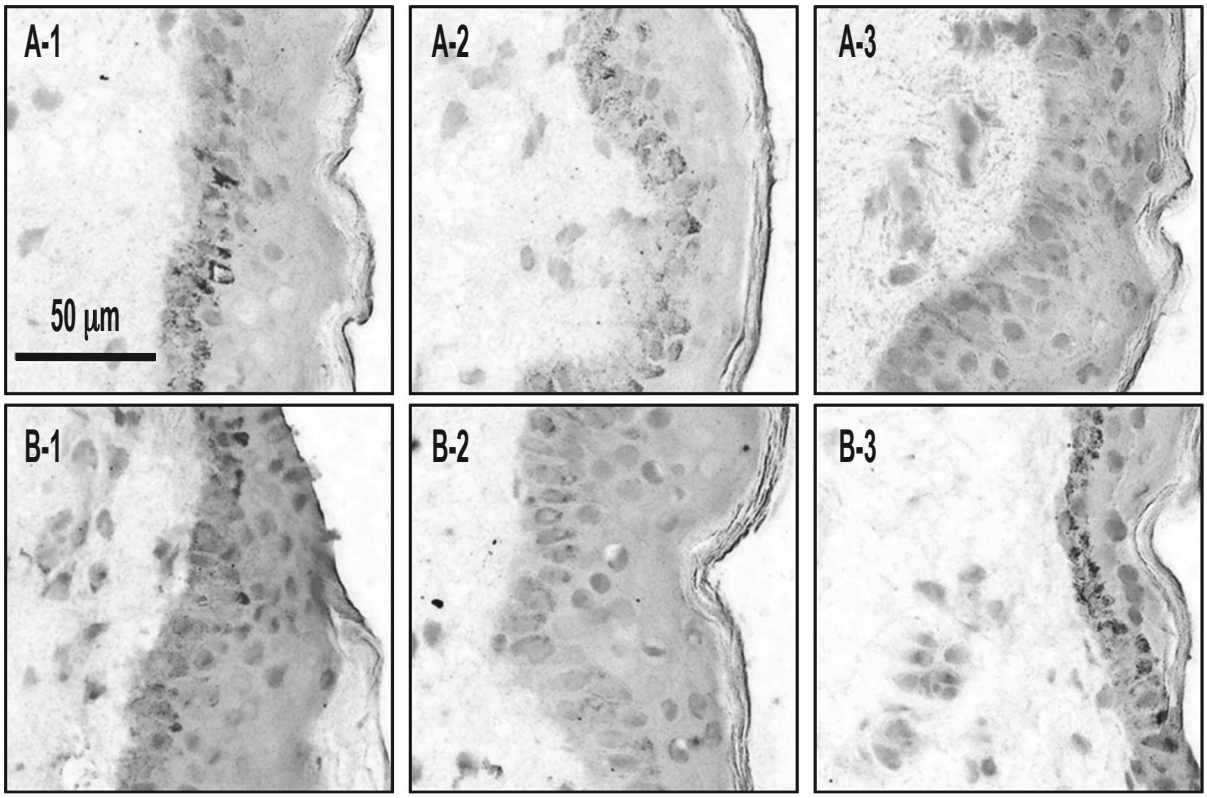

Figure 17

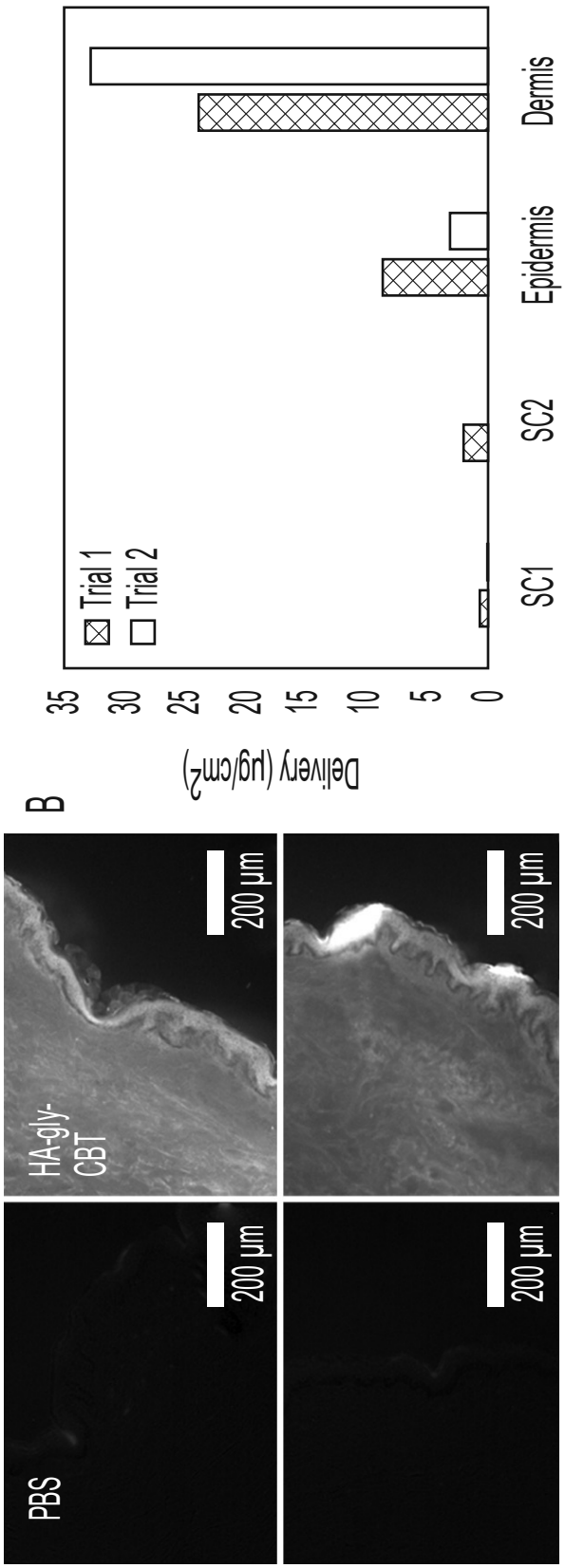
A
PBS
HA-gly-CBT
200 µm
200 µm
200 µm
200 µm
B
Delivery (µg/cm²)
35
30
25
20
15
10
5
0
Trial 1
Trial 2
SC1
SC2
Epidermis
Dermis

Figure 18