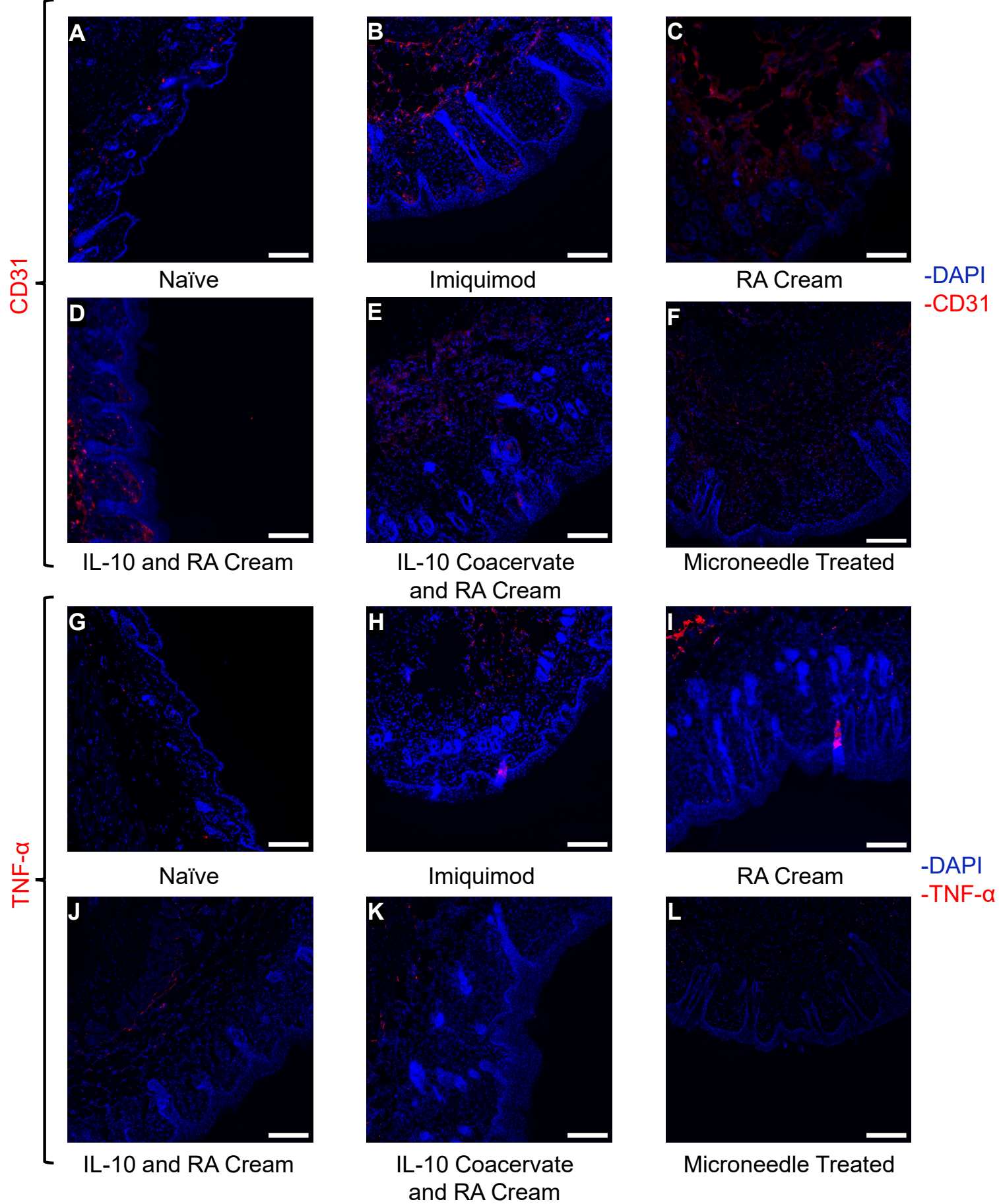


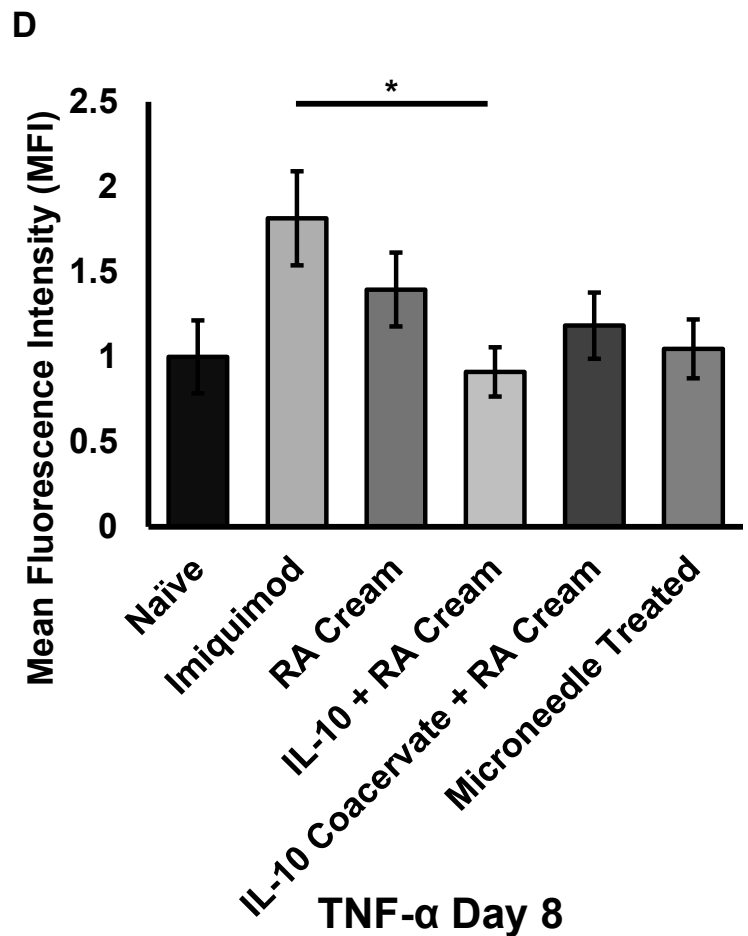
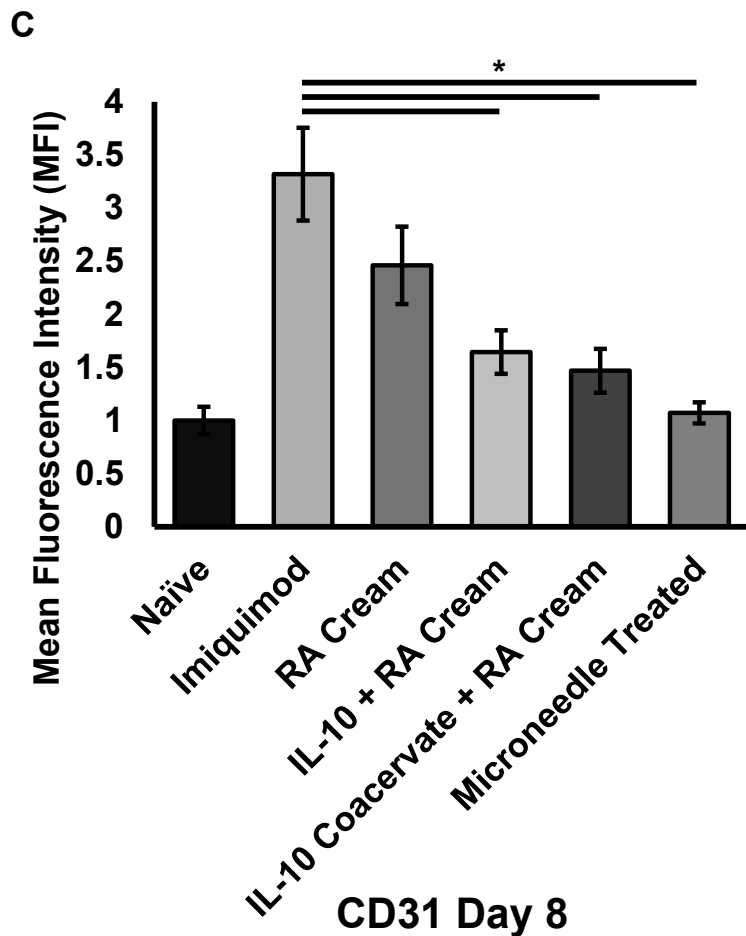
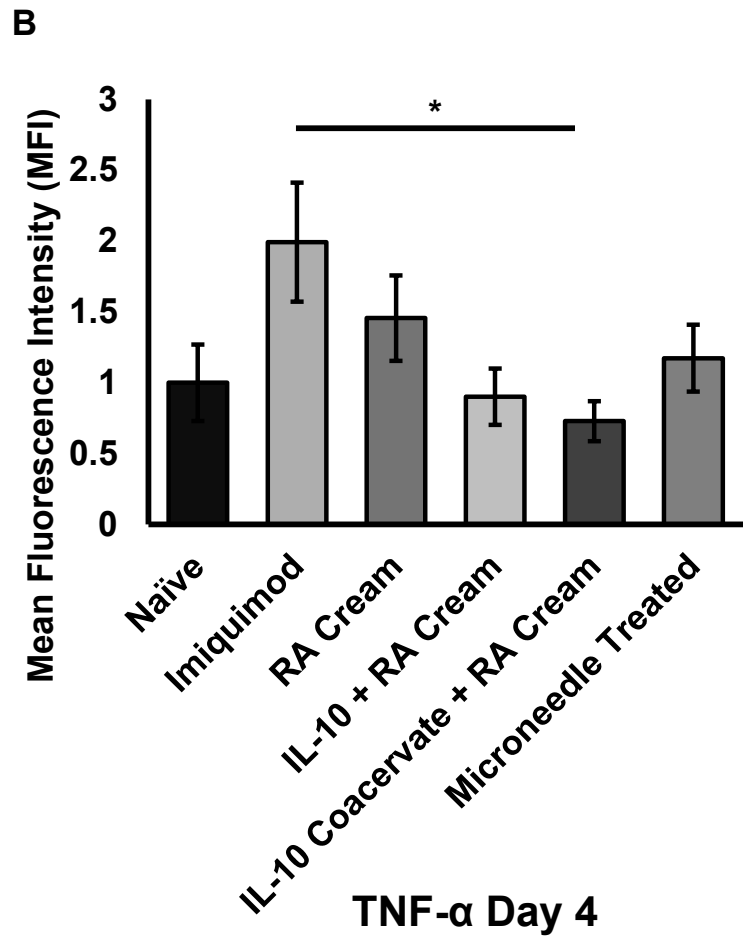
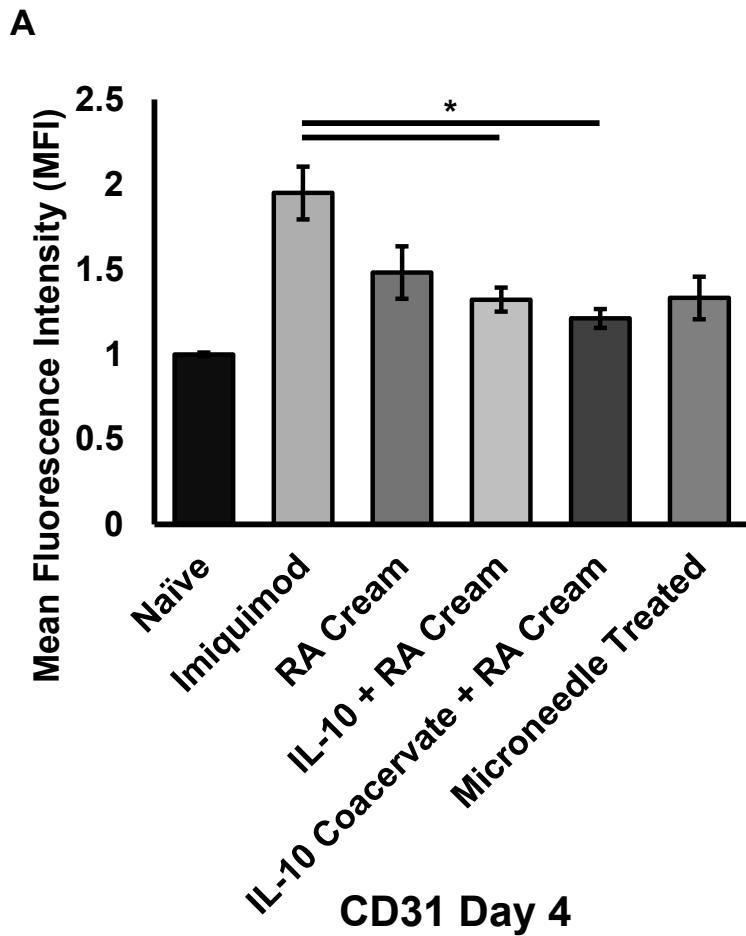
Group Comparison (Day 4)	Mean diff.	SE of diff.	q
Naïve vs. IMQ	-33.57	2.019	23.51
Naïve vs. RA Cream	-28.3	2.019	19.82
Naïve vs. IL-10 and RA Cream	-20.95	2.019	14.67
Naïve vs. IL-10 Coacervate and RA Cream	-8.58	2.019	6.009
Naïve vs. Microneedle Treated	-13.07	2.019	9.156
IMQ vs. RA Cream	5.265	2.019	3.687
IMQ vs. IL-10 and RA Cream	12.62	2.019	8.84
IMQ vs. IL-10 Coacervate and RA Cream	24.99	2.019	17.5
IMQ vs. Microneedle Treated	20.5	2.019	14.36
RA Cream vs. IL-10 and RA Cream	7.357	2.019	5.152
RA Cream vs. IL-10 Coacervate and RA Cream	19.73	2.019	13.81
RA Cream vs. Microneedle Treated	15.23	2.019	10.67
IL-10 and RA Cream vs. IL-10 Coacervate and RA Cream	12.37	2.019	8.662
IL-10 and RA Cream vs. Microneedle Treated	7.875	2.019	5.516
IL-10 Coacervate and RA Cream vs. Microneedle Treated	-4.493	2.019	3.147

Group Comparison (Day 8)	Mean diff.	SE of diff.	q
Naïve vs. IMQ	-59.86	3.588	23.59
Naïve vs. RA Cream	-56.93	3.588	22.44
Naïve vs. IL-10 and RA Cream	-55.82	3.588	22
Naïve vs. IL-10 Coacervate and RA Cream	-41.32	3.588	16.29
Naïve vs. Microneedle Treated	-21.53	3.588	8.486
IMQ vs. RA Cream	2.929	3.588	1.154
IMQ vs. IL-10 and RA Cream	4.039	3.588	1.592
IMQ vs. IL-10 Coacervate and RA Cream	18.53	3.588	7.305
IMQ vs. Microneedle Treated	38.33	3.588	15.11
RA Cream vs. IL-10 and RA Cream	1.11	3.588	0.4377
RA Cream vs. IL-10 Coacervate and RA Cream	15.6	3.588	6.151
RA Cream vs. Microneedle Treated	35.4	3.588	13.95
IL-10 and RA Cream vs. IL-10 Coacervate and RA Cream	14.49	3.588	5.713
IL-10 and RA Cream vs. Microneedle Treated	34.29	3.588	13.52
IL-10 Coacervate and RA Cream vs. Microneedle Treated	19.8	3.588	7.803

Supplementary Table 1: Tukey test results from epidermal thickness measurements (n=30). Measurements processed using GraphPad Prism.



Supplementary Figure 1: Immunofluorescence staining of mouse skin on day 8. A-F) CD31 and G-L) TNF- α stained skin tissue samples. All skin samples were stained with DAPI to label nuclei of cells. Scale Bar: 100 μ m.



Supplementary Figure 2: Normalized MFI of immunofluorescent signal of CD31 and TNF-α on day 4 and day 8 (n=3). SEM shown.