

SUPPLEMENTARY TABLE S1

*Effect of Topical Application of RTA 408 after Fractionated Radiation Exposure on Skin
Histological Grading*

Group ^a	Epidermal Thickening	Follicular Hypertrophy	Follicular Atrophy	Thickened Collagen	Inflammation	Ulceration	Necrosis	Parakeratosis	Sum
Day 16									
Vehicle	2.4 ± 0.3	2.1 ± 0.2	1.4 ± 0.8	2.0 ± 0.2	1.8 ± 0.5	1.4 ± 0.9	0.1 ± 0.1	2.6 ± 0.4	13.8 ± 1.8
RTA 408 (0.01%)	3.5 ± 0.3	2.7 ± 0.6	2.0 ± 1.0	3.0 ± 0.3	1.8 ± 0.2	2.2 ± 0.7	1.2 ± 0.2	3.2 ± 0.2	19.5 ± 1.0
RTA 408 (0.1%)	3.1 ± 0.4	2.6 ± 0.4	0.8 ± 0.3	2.6 ± 0.6	2.0 ± 0.4	0.3 ± 0.1	0.1 ± 0.1	1.8 ± 0.7	13.3 ± 2.1
RTA 408 (1.0%)	3.0 ± 0.2	2.1 ± 0.1	0.6 ± 0.3	2.1 ± 0.4	1.6 ± 0.3	0.0 ± 0.0	0.0 ± 0.0	1.5 ± 0.4	11.0 ± 1.4
Day 30									
Vehicle	2.2 ± 0.2	0.4 ± 0.2	1.4 ± 0.2	1.8 ± 0.3	1.7 ± 0.2	0.1 ± 0.1	0.0 ± 0.0	1.4 ± 0.2	9.0 ± 0.8
RTA 408 (0.01%)	2.3 ± 0.2	0.8 ± 0.1	1.7 ± 0.4	1.4 ± 0.3	1.6 ± 0.2	0.4 ± 0.3	0.1 ± 0.1	1.9 ± 0.4	10.2 ± 1.2
RTA 408 (0.1%)	1.8 ± 0.3	0.5 ± 0.1	0.4 ± 0.2†	0.9 ± 0.3*	1.0 ± 0.2**	0.0 ± 0.0	0.0 ± 0.0	0.9 ± 0.3	5.5 ± 1.1*
RTA 408 (1.0%)	1.8 ± 0.3	0.4 ± 0.1	0.9 ± 0.2	0.6 ± 0.2**	0.9 ± 0.1**	0.0 ± 0.0	0.0 ± 0.0	0.9 ± 0.2	5.7 ± 0.9*
Day 40									
Vehicle	2.2 ± 0.1	0.8 ± 0.3	1.3 ± 0.2	1.4 ± 0.3	1.8 ± 0.3	0.5 ± 0.2	0.4 ± 0.1	1.2 ± 0.2	9.6 ± 1.0
RTA 408 (0.01%)	2.3 ± 0.5	0.5 ± 0.2	0.6 ± 0.1	2.0 ± 0.4	1.5 ± 0.4	0.1 ± 0.1*	0.1 ± 0.1	1.0 ± 0.5	8.1 ± 1.9
RTA 408 (0.1%)	1.5 ± 0.3†	0.2 ± 0.1	0.4 ± 0.2*	1.3 ± 0.1	1.2 ± 0.2	0.1 ± 0.1*	0.1 ± 0.1*	0.6 ± 0.3	5.4 ± 0.9*
RTA 408 (1.0%)	0.7 ± 0.2**	0.1 ± 0.1	0.9 ± 0.2	0.2 ± 0.2**	1.0 ± 0.3	0.0 ± 0.0**	0.0 ± 0.0**	0.2 ± 0.1†	3.1 ± 0.8**

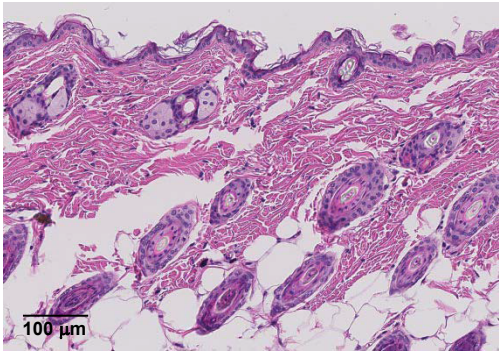
^aMice were irradiated with 10 Gy/day of radiation on days 0-2 and 5-7 and topically administered vehicle (sesame oil) or RTA 408 (0.01%, 0.1%, or 1.0%) once daily on Days -5 to up to 40. On days of irradiation, vehicle or RTA 408 was applied after exposure to radiation. H&E stained slides of skin were evaluated by a board (ACVP)-certified pathologist. Skin was scored subjectively on a scale for epidermal thickening, follicular hypertrophy, follicular atrophy, thickened collagen, inflammation, ulcer, necrosis, keratin cysts, and parakeratosis. Scores were: 1=minimally detectible, 2= mild, 3= moderate, 4= marked and 5= severe. Summed scores for each animal were also calculated on each day. Data are presented as mean ± S.E.M. Statistical notations vs. vehicle control group are shown (**p<0.01, *p<0.05, and †p<0.1).

Supplementary Fig. S1

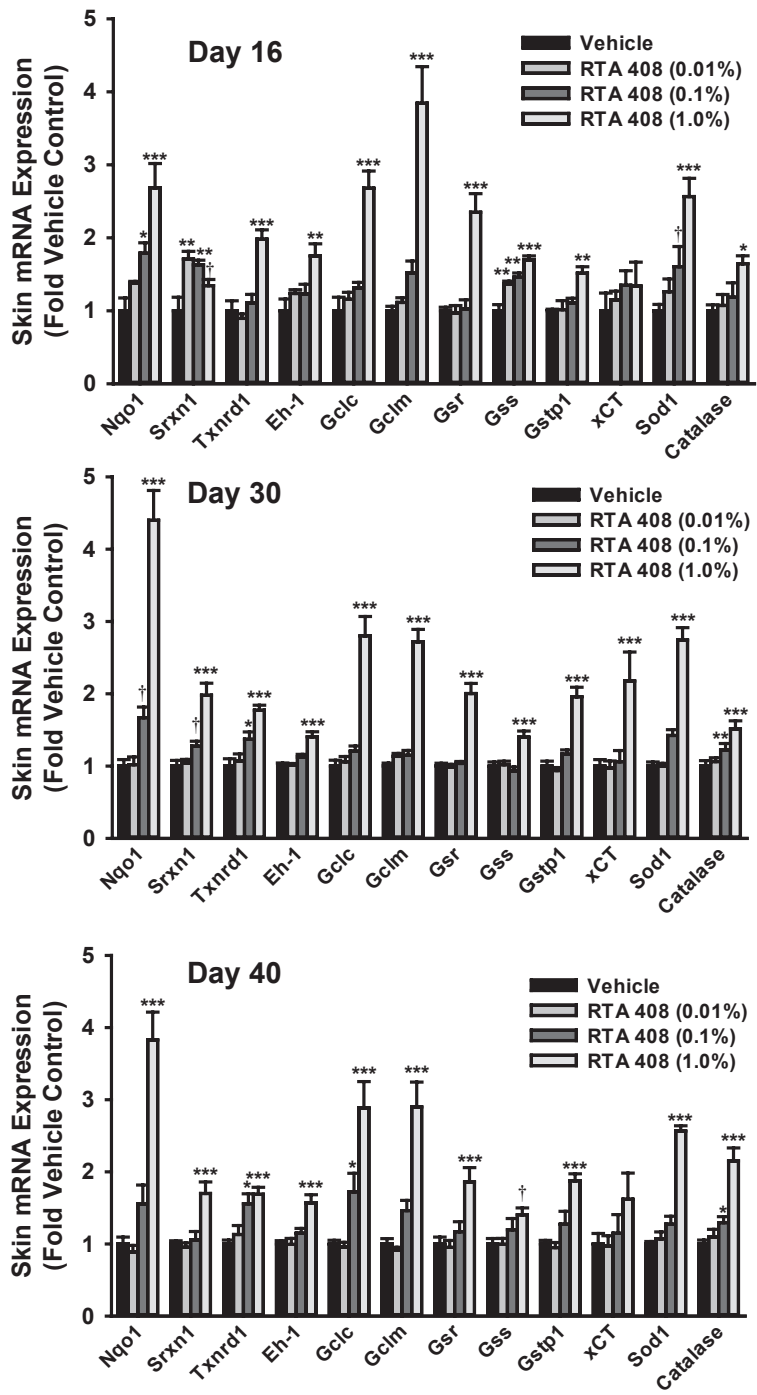
A



B



Supplementary Fig. S2



Supplementary Fig. S3

