

Supplement to the manuscript:

Establishment and Characterization of Mild Atopic Dermatitis in the DNCB-Induced Mouse Model

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Supplement

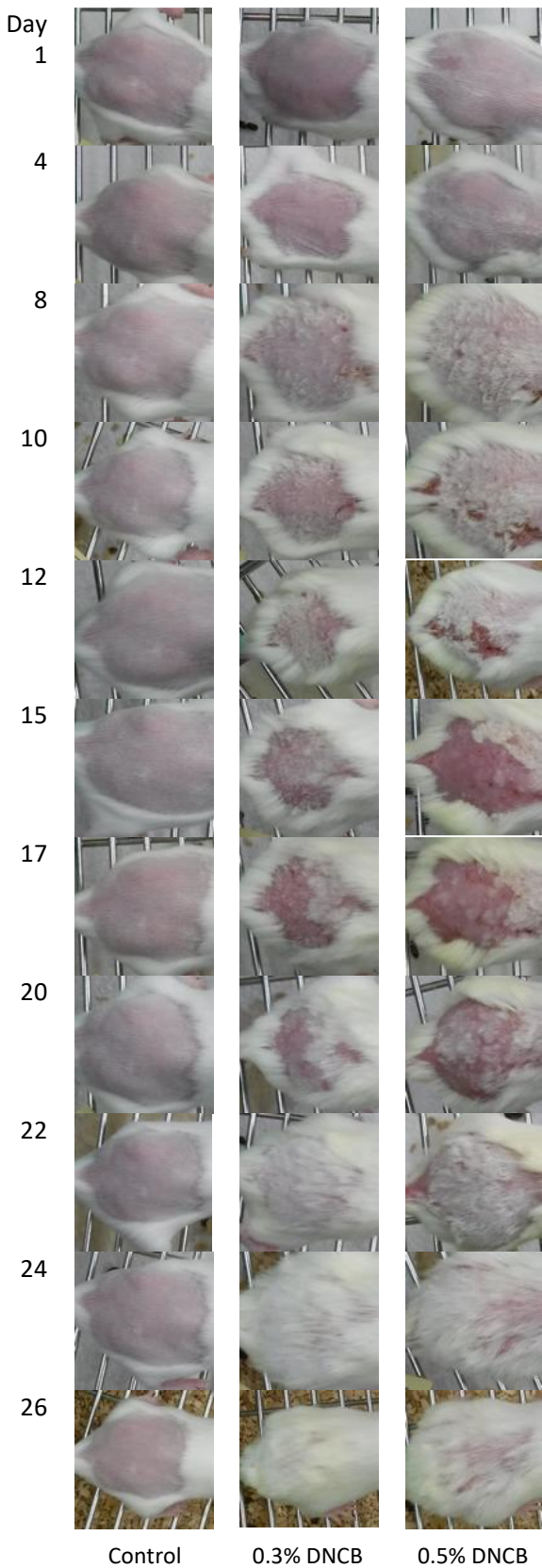


Figure S1. Representative images of the dorsal murine skin during the experiment. Images were taken before DNCB or vehicle application.

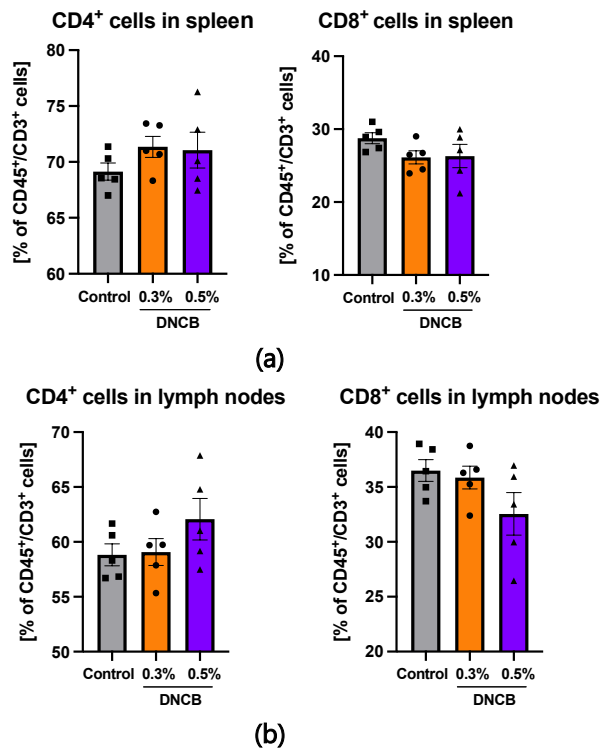


Figure S2. CD4⁺ and CD8⁺ cells in CD45⁺/CD3⁺ (a) isolated splenocytes and (b) lymphocytes at the end of the experiment. Data are presented as the mean $\pm$ SEM (n=5/group). Squares, dots and triangles represent one individual.

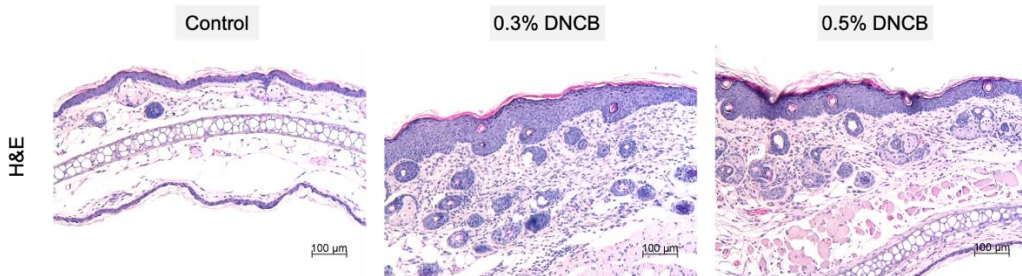


Figure S3. Representative hematoxylin and eosin (H&E) staining of the right ear. Scale bar: 100 μ m.

			control		0.3% DNCB			0.5% DNCB			
0		1	2	mean	SEM	mean	SEM	f	mean	SEM	f
SPMs		RvD5	3.0 ± 0.7		12 ± 2.5	4.00		6.4 ± 1.2	2.13		
		PD1	0.7 ± 0.3		3.7 ± 0.7	5.29		2.3 ± 0.4	3.29		
		PDX	3.3 ± 0.9		16 ± 3.0	4.85		7.4 ± 1.7	2.24		
		MaR2	1.6 ± 0.4		6.6 ± 1.1	4.13		5.0 ± 1.0	3.13		
12-/15-LOX products		17-HDHA	136 ± 30		331 ± 44	2.43		222 ± 34	1.63		
		15-HEPE	20 ± 5.4		53 ± 9.6	2.65		44 ± 7.8	2.20		
		15-HETE	180 ± 23		459 ± 45	2.55		323 ± 48	1.79		
		14-HDHA	346 ± 72		762 ± 81	2.20		494 ± 82	1.43		
		12-HEPE	94 ± 20		82 ± 11	0.87		77 ± 5.8	0.82		
		12-HETE	1830 ± 212		2441 ± 295	1.33		2005 ± 168	1.10		
5-LOX products		7-HDHA	3.3 ± 0.4		4.6 ± 1.1	1.39		2.7 ± 0.2	0.82		
		5-HEPE	1.8 ± 0.2		1.4 ± 0.1	0.78		1.1 ± 0.1	0.61		
		5-HETE	46 ± 5.7		56 ± 7.6	1.22		38 ± 2.7	0.83		
		t-LTB ₄	14 ± 2.4		37 ± 4.4	2.64		29 ± 3.9	2.07		
		et-LTB ₄	18 ± 3.3		42 ± 5.8	2.33		35 ± 4.6	1.94		
		LTB ₄	n.d. ± -		n.d. ± -	1.00		n.d. ± -	1.00		
COX products		PGD ₂	1364 ± 75		1165 ± 114	0.85		1091 ± 124	0.80		
		PGE ₂	1664 ± 99		3265 ± 394	1.96		3269 ± 301	1.96		
		PGF _{2α}	157 ± 6.4		230 ± 30	1.46		236 ± 40	1.50		
		TXB ₂	77 ± 9.0		157 ± 19	2.04		112 ± 7.9	1.45		
other		13-HDHA	41 ± 3.7		40 ± 5.3	0.98		36 ± 7.4	0.88		
		10-HDHA	16 ± 3.9		31 ± 5.3	1.94		18 ± 3.6	1.13		
		4-HDHA	6.0 ± 0.8		6.7 ± 1.1	1.12		4.7 ± 0.4	0.78		
		11-HEPE	3.1 ± 0.3		4.3 ± 0.4	1.39		4.2 ± 0.8	1.35		
		11-HETE	196 ± 12		260 ± 14	1.33		225 ± 35	1.15		
		8-HETE	91 ± 23		225 ± 41	2.47		123 ± 22	1.35		
		9-HODE	1252 ± 68		1180 ± 120	0.94		976 ± 124	0.78		
		13-HODE	1437 ± 118		2049 ± 271	1.43		1588 ± 274	1.11		
		5,15-diHETE	15 ± 2.4		37 ± 5.5	2.47		23 ± 4.6	1.53		
		5,12S-diHETE	19 ± 3.3		47 ± 7.0	2.47		33 ± 7.4	1.74		
PUFA		AA	34124 ± 4420		56278 ± 8018	1.65		37634 ± 3056	1.10		
		EPA	3437 ± 597		4438 ± 854	1.29		2745 ± 308	0.80		
		DHA	12377 ± 1539		16961 ± 2524	1.37		11693 ± 1516	0.94		

Figure S4. Effects of DNCB treatment on lipid mediator formation in murine dorsal skin. Data are presented in pg/mg as means ± SEM and fold change (f) to control group (n=5/ group).

Table S1. Commercially validated primers used with a customized 384-well RT2 PCR Array Plate (Qiagen)

Gene name	GeneGlobe ID (Qiagen)
<i>PPIH</i>	QT01165318
<i>IL18</i>	QT00171129
<i>CCL5</i>	QT01747165
<i>CCL11</i>	QT00114275
<i>TSLP</i>	QT00198261
<i>KRT5</i>	QT01060325
<i>KRT10</i>	QT00493241
<i>FLG</i>	QT01195929
<i>LOR</i>	QT00248192
<i>SEMA3A</i>	QT00173971
<i>KLK7</i>	QT00150962
<i>KLK5</i>	QT01563177