

hIL1RL1/hIL4/hIL4R

系統名	C57BL/6Smoc- <i>Il1rl1</i> ^{tm4(hIL1RL1)} / <i>Il4</i> ^{tm3(hIL4)Il4ratm1(hIL4R)Smoc}
SMOC番号	NM-HU-232112
維持形態	Repository Live

遺伝子の概要

Gene Symbol IL4	Synonyms	Il-4; BSF-1
	NCBI ID	16189
	MGI ID	96556
	Ensembl ID	ENSMUSG00000000869
	Human Ortholog	IL4
Gene Symbol IL4Ra	Synonyms	Il4r; CD124
	NCBI ID	16190
	MGI ID	105367
	Ensembl ID	ENSMUSG00000030748
	Human Ortholog	IL4RA
Gene Symbol Il4	Synonyms	BSF-1; Il-4
	NCBI ID	16189
	MGI ID	96556
	Ensembl ID	ENSMUSG00000000869
	Human Ortholog	IL4
Gene Symbol Il1rl1	Synonyms	T1; St2; DER4; Ly84; ST2L; Fit-1; T1/ST2; St2-rs1
	NCBI ID	17082
	MGI ID	98427
	Ensembl ID	ENSMUSG00000026069
	Human Ortholog	IL1RL1

説明

The hIL4/hIL4R(NM-HU-2000106) was crossed with hIL1RL1(NM-HU-2000067) to generate hIL1RL1/hIL4/hIL4R mice.

*Literature published using this strain should indicate: hIL1RL1/hIL4/hIL4R mice (Cat. NO. NM-HU-232112) were purchased from Shanghai Model Organisms Center, Inc..

表現型データ

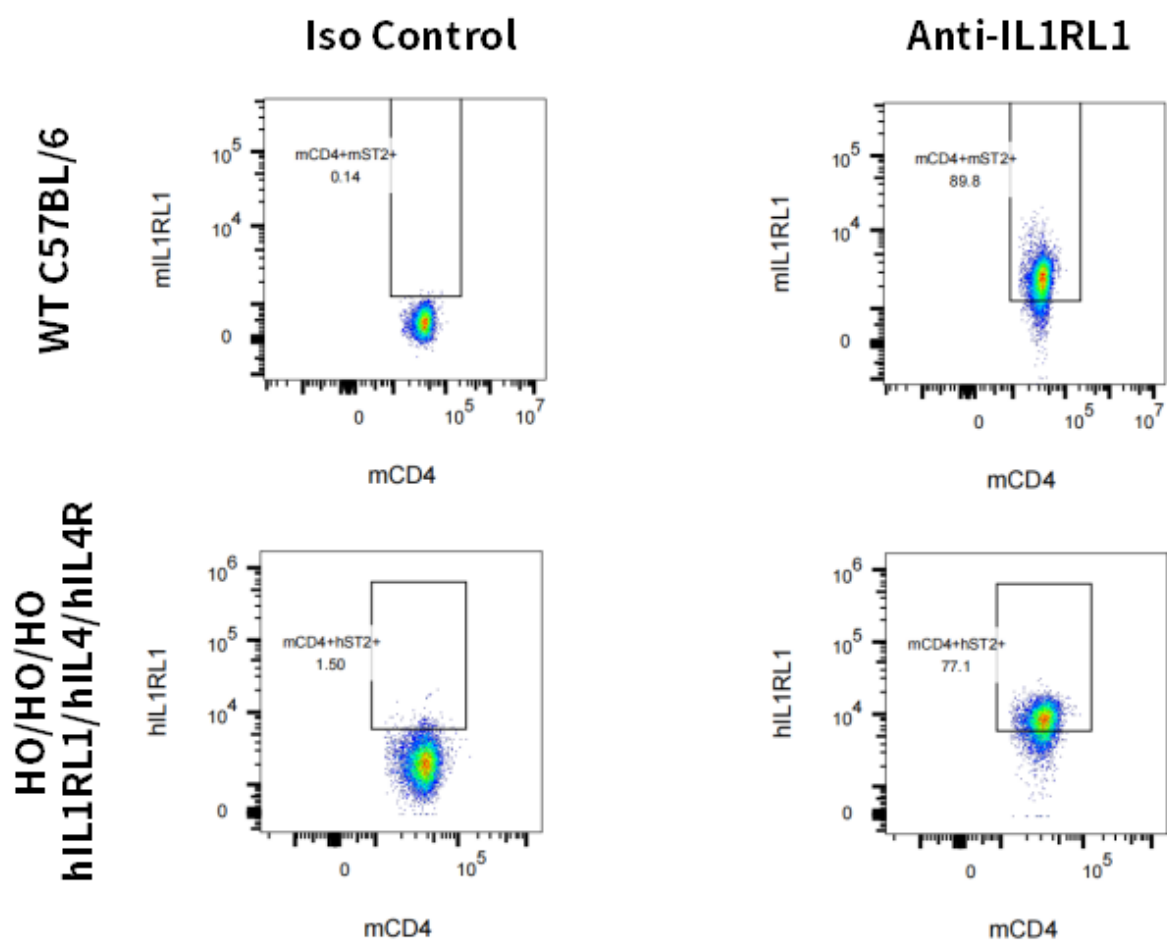


Fig1. Expression of hIL1RL1 on CD4⁺ T cells in spleen in hIL1RL1/hIL4/hIL4R tKI mice.

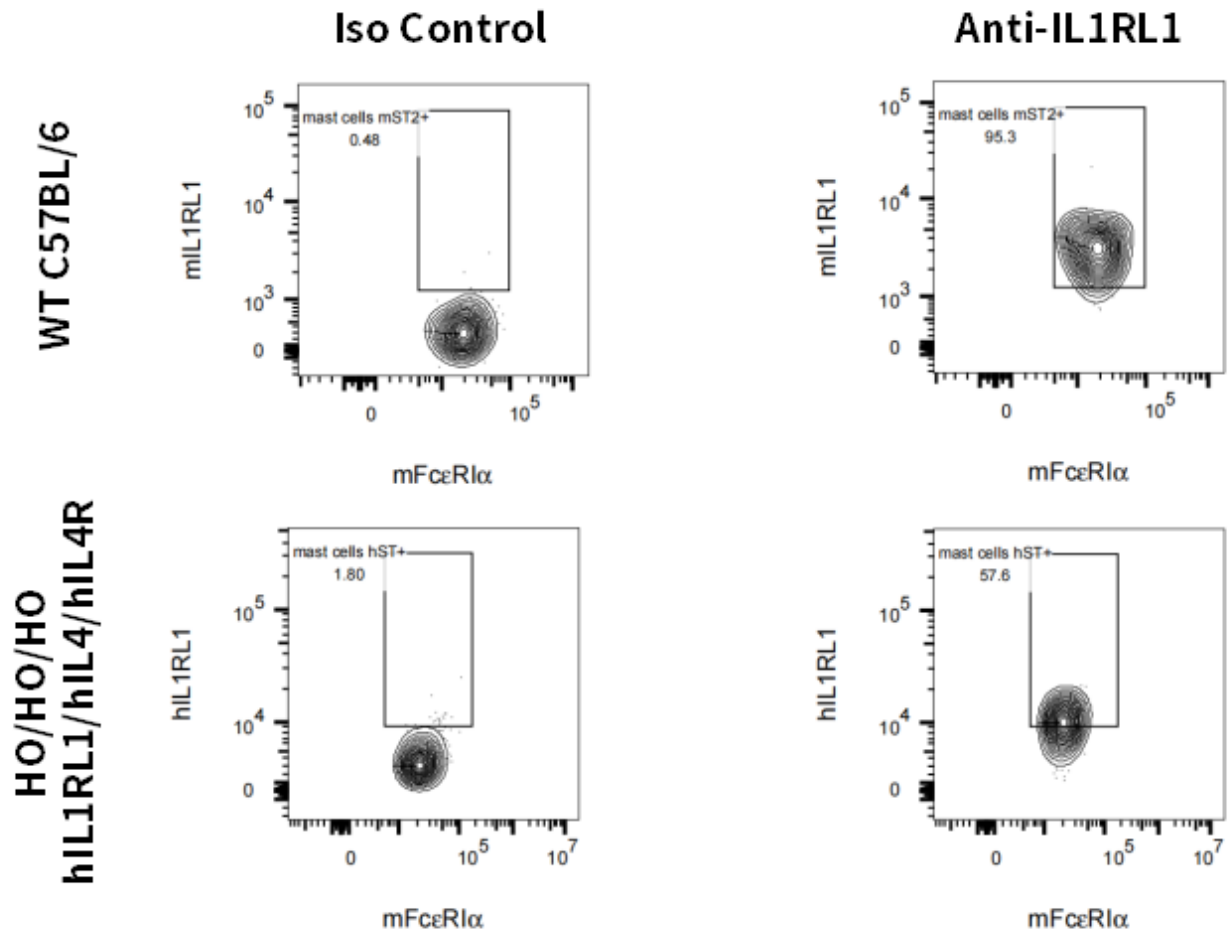


Fig2. Expression of hIL1RL1 on mast cells in bone marrow in hIL1RL1/hIL4/hIL4R tKI mice.

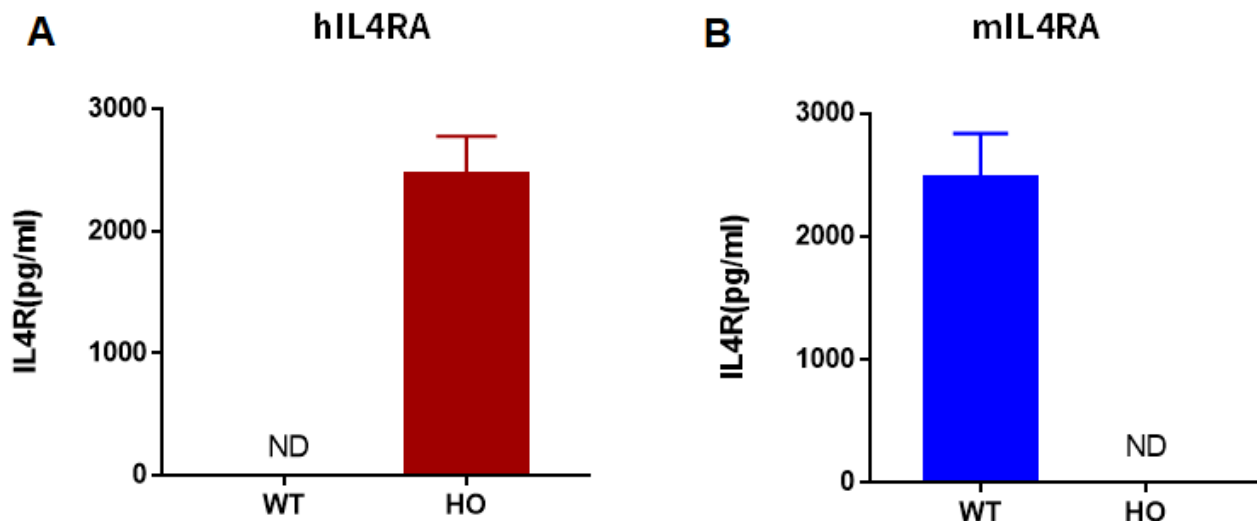


Fig3. Detection of soluble form hIL4RA (A) and mIL4RA (B) expression in hIL4RA mice by ELISA.

Abbr. HO: homozygote; WT: Wild type; ND: Not detected.

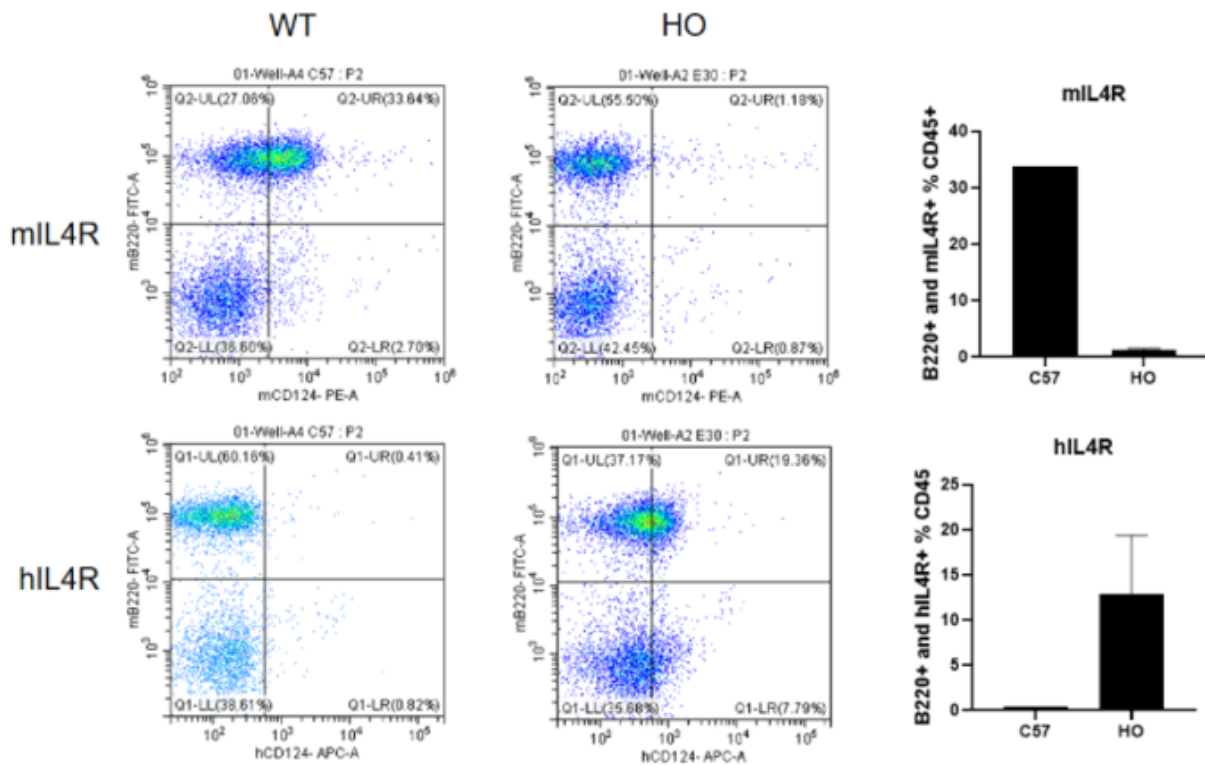


Fig4. Analysis of hIL4R expression in the spleen in hIL4/hIL4R dKI mice by FACS.

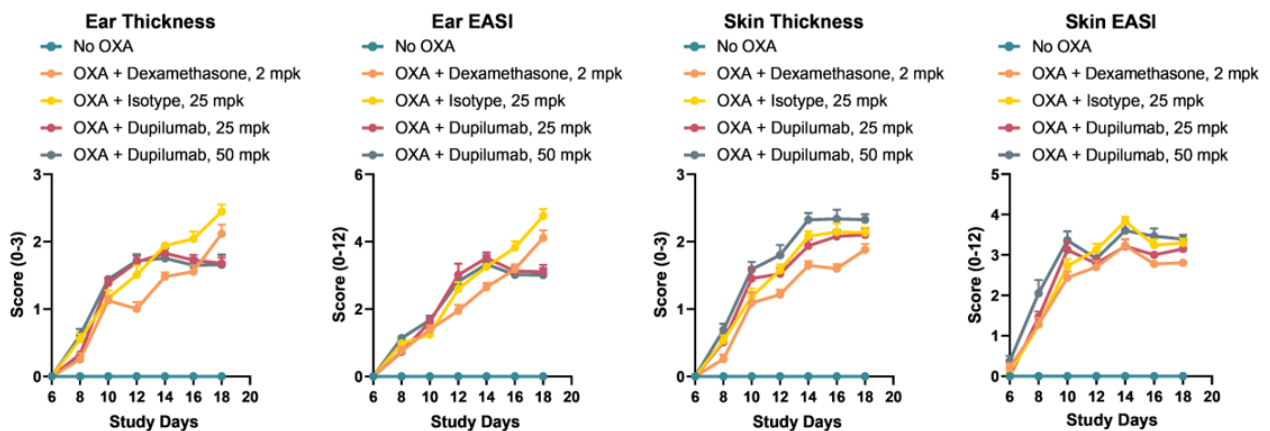


Fig5. Evaluation of an Anti-huIL4Ra mAb in the OXA-Induced Atopic Dermatitis Model in hIL4/hIL4Ra dKI Mice.

Both dupilumab and Dexamethasone ameliorate overall atopic dermatitis activity in OXA - challenged ears, but only Dexamethasone worked in back skin. (In cooperation with CrownBio)

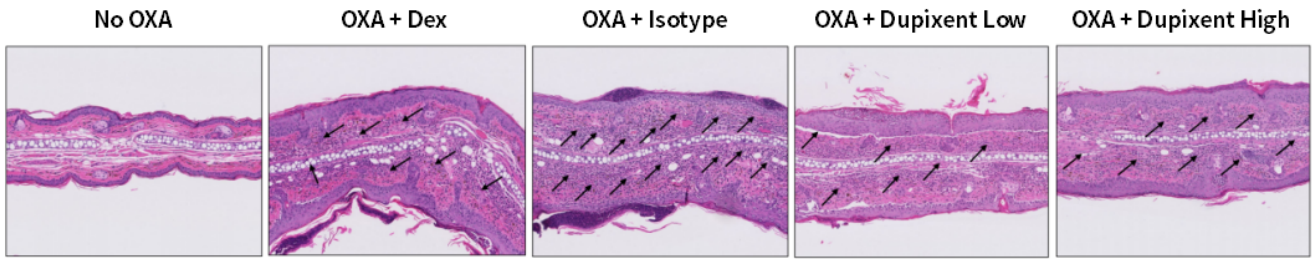


Fig6. Dupilumab significantly mitigates inflammatory cell infiltration in lesioned ear. (In cooperation with CrownBio)

Note: Inflammatory cell infiltration is indicated by black arrows, 10X images

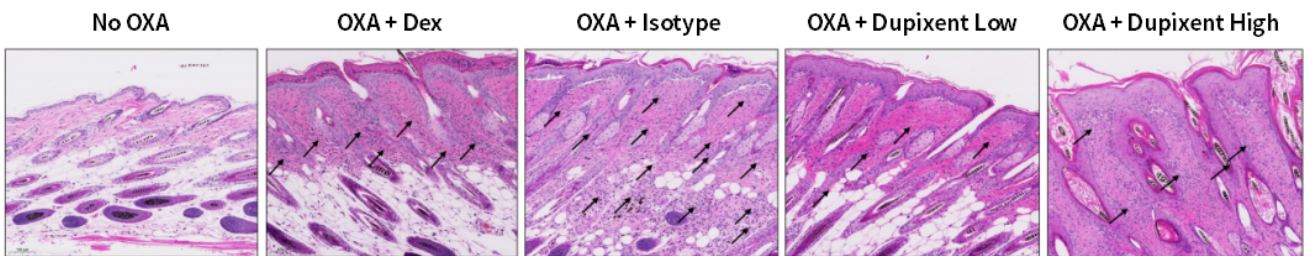


Fig7. Low dose dupilumab significantly mitigates inflammatory cell infiltration in lesioned skin. (In cooperation with CrownBio)

Note: Inflammatory cell infiltration is indicated by black arrows, 10X images

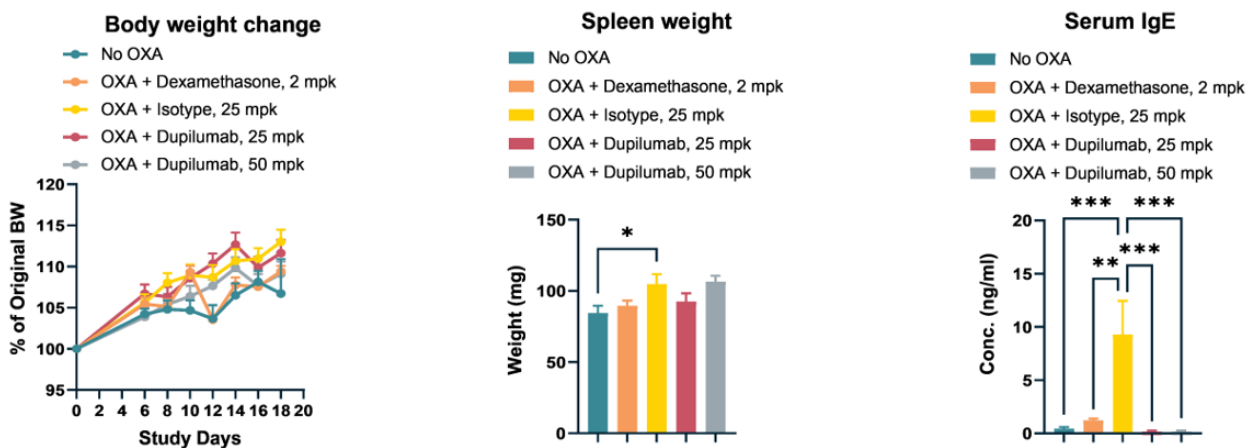


Fig8. Dexamethasone and dupilumab treatments are well tolerated. Both significantly reduced IgE levels in serum but not spleen weight. (In cooperation with CrownBio)

Ordinary one-way ANOVA were applied for analysis compared to Isotype group, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

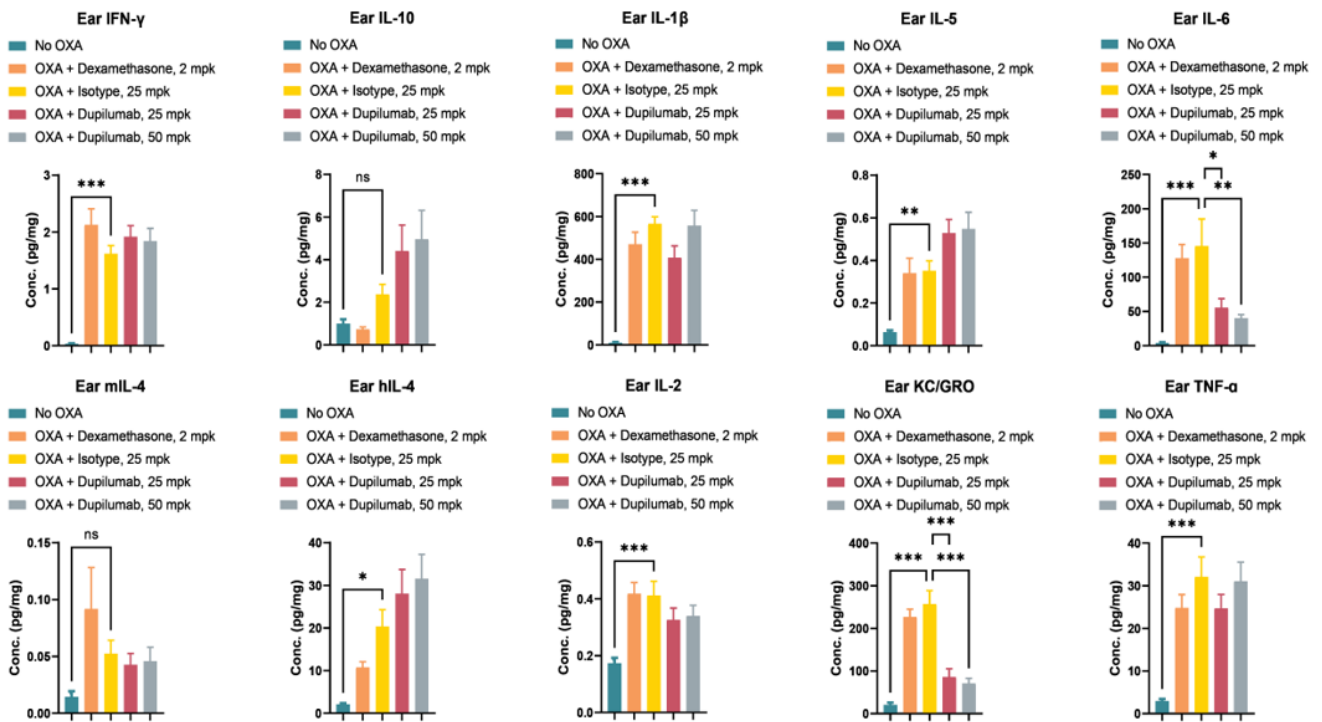


Fig9. Repeated OXA-induced Th2 cytokine production (hIL-4 elevation) and dupilumab treatment significantly reduces IL-6 and KC/GRO levels in lesioned ear. (In cooperation with CrownBio)

Ordinary one-way ANOVA were applied for analysis compared to Isotype group, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

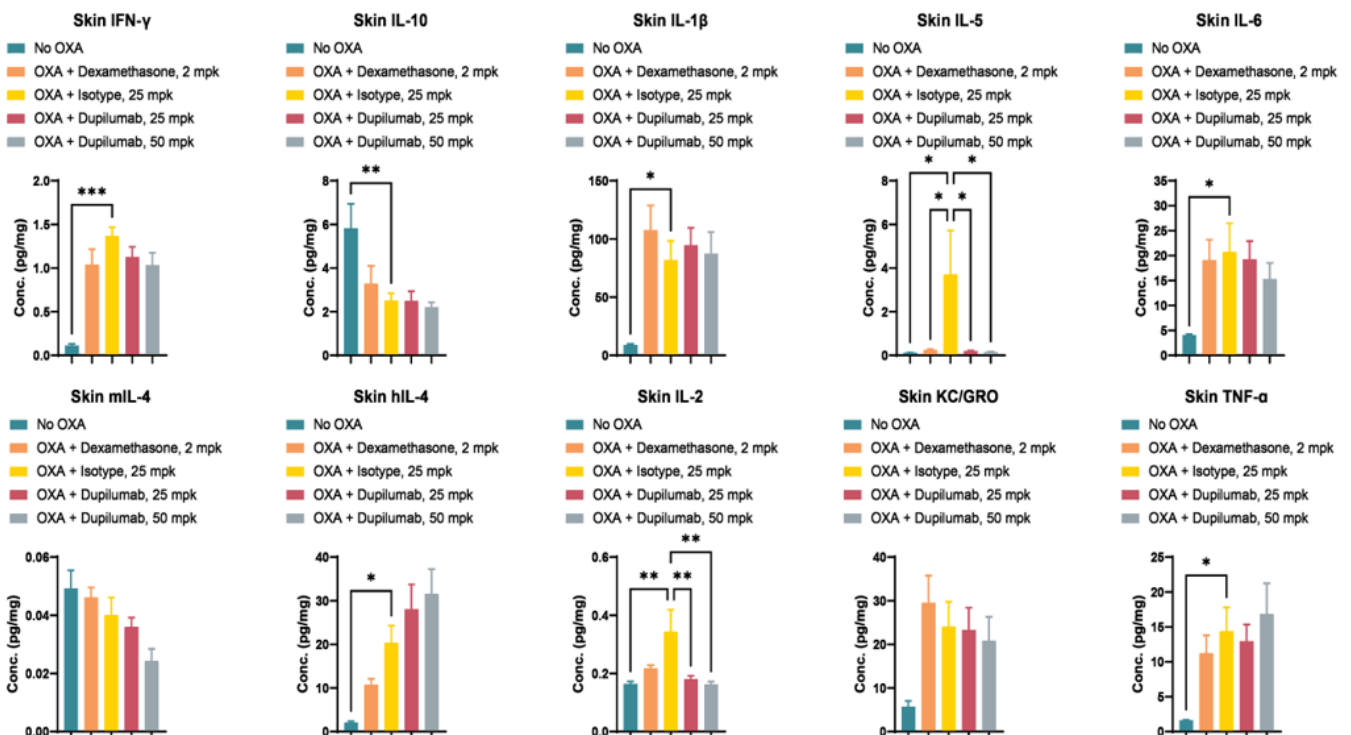


Fig10. Repeated OXA-induced Th2 cytokine production (hIL-4 elevation) and dupilumab treatment significantly reduces IL-5 and IL-2 levels in lesioned skin. (In cooperation with CrownBio)

Ordinary one-way ANOVA were applied for analysis compared to Isotype group, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
