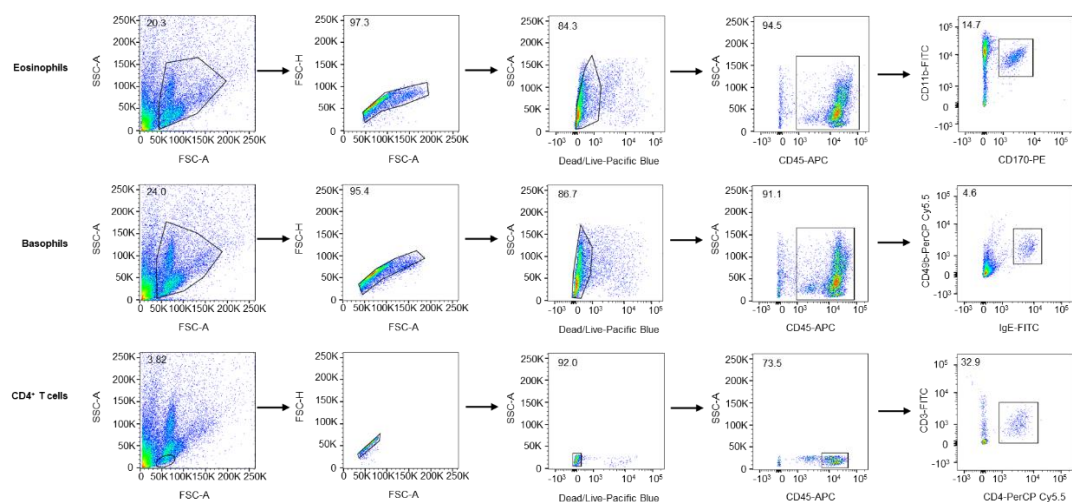


IL-17D-induced inhibition of DDX5 expression in keratinocytes amplifies IL-36R-mediated skin inflammation

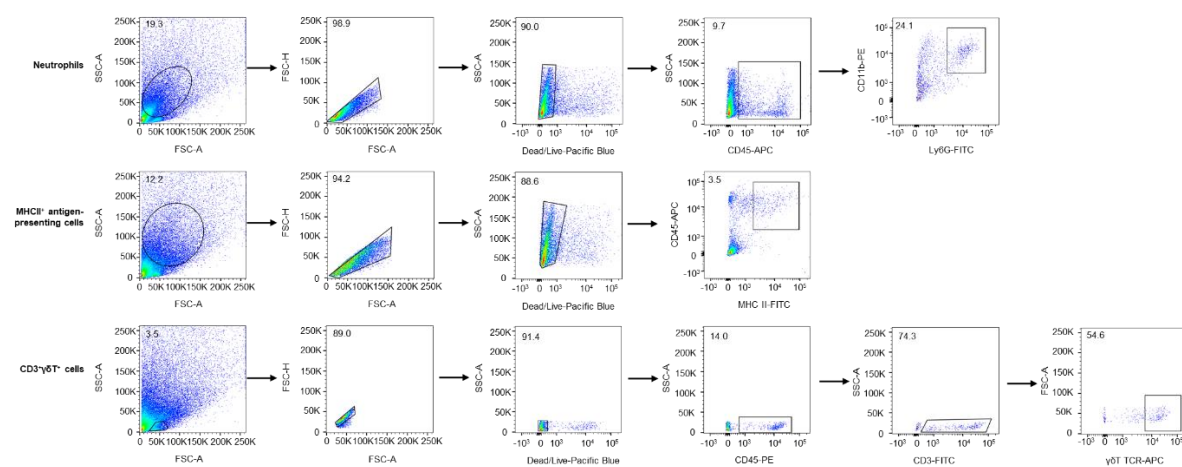
In the format provided by the
authors and unedited

Supplementary information

Supplementary gating strategy



Gating of eosinophils, basophils and CD4⁺ T cells in lesional skin from AD-like mice.



Gating of neutrophils, MHCII⁺ APCs and γδT cells in lesional skin from psoriasis-like mice.

Table 1. The information of healthy controls and patients with AD, psoriasis, BCC and SCC

Sample ID		Age	Sex	Comorbidities
Healthy control	1	29	female	no
	2	63	female	no
	3	37	female	no
	4	27	female	no
	5	26	male	no
	6	63	male	no
	7	67	male	no
	8	64	male	no
AD	1	14	female	no
	2	41	female	no
	3	57	female	no
	4	54	female	no
	5	59	male	no
	6	34	male	no
	7	39	male	no
Psoriasis	1	73	female	no
	2	42	female	no
	3	68	female	no
	4	30	female	no
	5	67	female	no
	6	43	female	no
	7	59	male	no
	8	74	male	no
	9	52	male	no
	10	23	male	no
Basal cell	1	56	male	no

carcinoma (BCC)	2	73	female	no
	3	79	female	no
Squamous cell carcinoma (SCC)	1	64	male	no
	2	61	male	no
	3	67	female	no

Table 2. Guide RNAs and siRNAs

Name	Sequence (5'→ 3')	Purpose
Cas9- <i>DDX5</i> -gRNA	CACCGTATTTCGAGTGACCGAGACCG AAACCGGTCTCGGTCACTCGAATAC	Deletion
Cas9- <i>SF2</i> -gRNA	CACCGAACGATTGCCGCATCTACGT AAACACGTAGATGCGGCAATCGTTC	Deletion
<i>siDDX5</i>	CCCGAAGCCAGUUCUAAAUTT AUUUAGAACUGGCUUCGGGTT	Silencing
<i>siSF2</i>	GCUAUGAUUACGAUGGGUATT UACCCAUCGUAAUCAUAGCTT	Silencing
<i>siIL36R</i>	GCAGGAGGCUGAUUGUCAUTT AUGACAAUCAGCCUCCUGCTT	Silencing
<i>siCD93</i>	GUGUGCAAGUUCAGCUUCATT UGAAGCUGAACUUGCACACTT	Silencing
<i>siDDX1</i>	GGAGUUAGCUGAACAAACUTT AGUUUGUUCAGCUAACUCCTT	Silencing
<i>siDDX3X</i>	GCCUCAGAUUCGUAGAAUATT UAUUCUACGAAUCUGAGGCTT	Silencing
<i>siDDX17</i>	CCUCCAUCAUGCUAACUUTT AAGUUAGCAUGAUGGAAGGTT	Silencing
<i>siDDX23</i>	GGAAACAGUCCAAGACUUTT AAGUCUUGGAACUGUUUCCTT	Silencing
<i>siDDX39</i>	GCAGCAGUACUACGUCAAATT UUUGACGUAGUACUGCUGCTT	Silencing
<i>siDDX41</i>	CCAUUCAGAUCCAGGGCAUTT AUGCCCUGGAUCUGAAUGGTT	Silencing
<i>siDDX42</i>	GCAGUGAUUGUGUGUCCUATT UAGGACACACAAUCACUGCTT	Silencing
<i>siDDX46</i>	GCAACAAGUGAUUGUGAUUTT AAUCACAAUCACUUGUUGCTT	Silencing
<i>siDDX48</i>	GCAAUCCAGCAACGAGCAATT UUGCUCGUUGCUGGAUUGCTT	Silencing

Table 3. Primers for constructing plasmids or RT-PCR

Name	Sequence (5'→ 3')	Purpose
<i>mIl23a</i>	CCCGTATCCAGTGTGAAGATG GGCTCCCCTTTGAAGATGTC	RT-PCR
<i>mIl17a</i>	GCTCCAGAAGGCCCTCAGA CTTCCCTCCGCATTGACA	RT-PCR
<i>mDdx5</i>	TGTGATTGCAAGGCAGAACTTT TGGCCAGCCCTGAGCTT	RT-PCR
<i>mIl17d</i>	GAGGAGGACTTCCGCTTTCG TGGTGATGTAGTGTTCGGCG	RT-PCR
<i>mIl36a</i>	GCAGACACATTCTATTCAATCA TGCTGCTCTTAGTTCTTTCTCCTTA	RT-PCR
<i>mIl36β</i>	ATGATGGCTTTCCCTCCAC ATTCGGTTCACATTTGAA	RT-PCR
<i>mIl36γ</i>	GGACACCCTACTTTGCTGCTA AACAGGAATGGCTTCATTGG	RT-PCR
<i>mCcl20</i>	GACTGTTGCCTCTCGT TGA CTCTTAGGCTGAGGA	RT-PCR
<i>mCxcl1</i>	CAGACCATGGCTGGGATTCA GACTTCGGTTTGGGTGCAGT	RT-PCR
<i>mCxcl2</i>	GGCGGTCAAAAAGTTTGCCTT ATGATTTTCTGAACCAGGGGG	RT-PCR
<i>mCxcl11</i>	AAACGACAAAGGTGCCTGGA CTGCATTATGAGGCGAGCTT	RT-PCR
<i>mSl100a9</i>	ATACTCTAGGAAGGAAGGACACC TCCATGATGTCAATTTATGAGGGC	RT-PCR
<i>mIl4</i>	ATCTACAGGACCCAGAGGATATTGC CTGATGTGAGAAAGGAAAATGAGTCC	RT-PCR
<i>mIl13</i>	CGCCATGCACGGAGATG CGAGCTCACTCTCTGTGGTGTT	RT-PCR
<i>mTslp</i>	AGGCTACCCTGAAACTGAG GGAGATTGCATGAAGGAATACC	RT-PCR
<i>mCcl11</i>	CTCCACAGCGCTTCTATTCTT TAAAGCAGCAGGAAGTTGGGA	RT-PCR
<i>mCcl17</i>	CAATGTAGGCCGAGAGTGCT TGCCCTGGACAGTCAGAAAC	RT-PCR
<i>mCcl22</i>	TCTGGACCTCAAAATCCTGCC GTCATCAGGTCCTCCTCCCTA	RT-PCR
<i>CDC5L</i>	AATCTCGTGAACATCTCCGTTTAGG CATCCACATCAGCAGCATCTTC	RT-PCR
<i>PRPF18</i>	TGTGGCTACAAGATACAGCCAA CGGCTCTCCTCTTTCTCTCAG	RT-PCR

Name	Sequence (5'→ 3')	Purpose
<i>DHX15</i>	CACATTTAGAACGAACGGGGC AAGCACCCATTTCAGGCTTGT	RT-PCR
<i>HNRNPA1</i>	AGGGTTATGGAAACCAGGGC TTCCACTACCACCGCCAAAG	RT-PCR
<i>SRSF1</i>	GCGTGAGGCAGGTGATGTAT GTAGGCAGTTTCTCCCTCGT	RT-PCR
<i>mGapdh</i>	CTTAGCCCCCTGGCCAAG TGGTCATGAGCCCTTCCACA	RT-PCR
<i>mIl36R-368</i>	GGGAGACACTTCACCATTAG ATGATGTAGGCTGCGGACAC	DNA-PAGE
<i>m18S</i>	ATCAGATACCGTCGTAGTTC CCAGAGTCTCGTTCGTTAT	PCR
<i>hGAPDH</i>	TCCACTGGCGTCTTCACC GGCAGAGATGATGACCCTTTT	RT-PCR
<i>hDDX5</i>	GCCATGTCGGGTATTTCG GGTTTCCAACTTCTTTCCAGA	RT-PCR
<i>hIL36α</i>	CATCTACCTGGGCCTGAATG GGGTTGGTTGTACAAATCCATTA	RT-PCR
<i>hIL-36β</i>	GACCAATGGGGAATAGGAGTG CCGCATGGATGAGAAATCTT	RT-PCR
<i>hIL36γ</i>	TGAGAGGCACTCCAGGAGAC GTCCCAGTAATAGGTTTACACATTGA	RT-PCR
<i>hIL17D</i>	TGGGCCTACAGAATCTCCTACGACC TGACGTAGGCCTCGGTGTAGACGG	RT-PCR
<i>hCCL20</i>	TTTATTGTGGGCTTCACACG GATTTGCGCACACAGACAAC	RT-PCR
<i>hCXCL1</i>	CAATCCTGCATCCCCCATAGT GGATTTGTCACTGTTTCAGCATCTT	RT-PCR
<i>hCXCL2</i>	CTTGTCTCAACCCCGCATCG CAGTTGGATTGTCATTTTTCAGC	RT-PCR
<i>hCXCL3</i>	AGAAAGCTTGTCTCAACCCCG GGTGCTCCCCTTGTTTCAGTA	RT-PCR
<i>hCXCL6</i>	TGTTTACGCGTTACGCTGAG GGCTACCACTTCCACCTTGG	RT-PCR
<i>hCXCL8</i>	TGGACCCCAAGGAAAACCTGG ATGAATTCTCAGCCCTCTTCAA	RT-PCR
<i>hCCL3</i>	CCAGTTCTCTGCATCACTTGC CACTGGCTGCTCGTCTCAAA	RT-PCR
<i>hCCL11</i>	ACCCCTTCAGCGACTAGAGA CCACTTCTTCTTGGGGTCGG	RT-PCR
<i>hCCL17</i>	CTTCAAGGGAGCCATTCCCC CTCTTGTTGTTGGGGTCCGA	RT-PCR

Name	Sequence (5'→ 3')	Purpose
<i>hCCL27</i>	TACAGCAGCATTCTACTGCC GTCTGAGAGTGGCTTTCGGTA	RT-PCR
<i>hCSF2</i>	GGGAGCATGTGAATGCCATC CTACTCAGGTTTCAGGAGACGC	RT-PCR
<i>hIL36R</i>	ATGTGGTCCTTGCTGCTC GCATCCATCTGCTGTGAC	RT-PCR
<i>hIL36RN</i>	ACTCGGCATTGAAGGTGCTT GGGACCACGCTGATCTCTTC	RT-PCR
<i>hIL38</i>	AGCCAGTACAGCTCACCAAG AAAACCTTGGTACGGGCTGAGG	RT-PCR
<i>hFOSL1</i>	AGCGCAGGCAGCCCAGCAG CCAGCTCTAGGCGCTCCTTC	DNA-PAGE
<i>hPCCA</i>	TCTGCGGGGACAACAATGGC GCCAACACAGACAGCCTCATC	DNA-PAGE
<i>hIL36G</i>	AGGAAGGGCCGTCTATCAATC AGCTGCAATGTGGGCTGTTC	DNA-PAGE
<i>hTLE4</i>	AGGTCAGTCCCATCTTCC ATCCGGGAGTAGAGTTACTGC	DNA-PAGE
<i>hIL17RC</i>	ACCCACTGCTCTCCGGTGA CCTCATCTTCAGGCTCTTCC	DNA-PAGE
<i>hCD6</i>	AAGCTTACCTGTGGGACTGC TTGTGCAAACCTCCGGGAAGC	DNA-PAGE
<i>hFGFR2</i>	ACCACATTAGAGCCAGAAGA GGCACAGCATGGAGCCGCT	DNA-PAGE
<i>hIL20RB</i>	ATTCCAGTGCACCTAGAAAC CTATGAGATCCAGGCCCTGA	DNA-PAGE
<i>hIL17RA</i>	GCTGCCTCAATGACTGCCTCAG CAGGAACTGGGCGAATTTTCAGG	DNA-PAGE
<i>hIL36R-465</i>	ATTCACCAGGACGAGACTTG AGGGACACTTCCTCCATATC	DNA-PAGE
<i>hIL7R</i>	GCTGCCTCAATGACTGCCTCAG CAGGAACTGGGCGAATTTTCAGG	DNA-PAGE
<i>hIL4R</i>	ACTTCCCGCTTGGGCGCCCGGACGGCGAAT GCAAGACCTTCATGTTCCCAGAG	DNA-PAGE
<i>hTSLPR</i>	ATGGGGCGGCTGGTTCTGCTGTG AAGATGGATTTCGGGTCTGGCAC	DNA-PAGE
<i>Ddx5-flox</i>	TCACATTGCCTTTGCGGCCC GCTAAACCTGTTTCCCCAGT	Genotyping
<i>K14Cre</i>	ATTGCTGCATTACCGGTGCG CAGCATTGCTGTCACTTGGTC	Genotyping
<i>sIL36R-P1.</i>	GGGGCGTGCTGAGCCAGACCTCCAT	Genotyping
<i>sIL36R-P2.</i>	TCCCGACAAAACCGAAAATCTGTGG	Genotyping

Name	Sequence (5'→3')	Purpose
<i>sIL36R-P3.</i>	TGCATCGCATTGTCTGAGTAGG	Genotyping
<i>EIIa Cre</i>	GCGCTGGAGTTTCAATACCG TTTGACAGGAAACGCAACGG	Genotyping
<i>Il17d-P1</i>	GCAGCGCATCGCCTTCTATC GTTACAGTTTAACACCGGAG	Genotyping
<i>Il17d-P2</i>	CCGAACACTACATCACCATCC GATGTGTGTGATGTGCTTGTATATC	Genotyping
<i>IL36R Exon 2</i>	GCTAGCAGATGGATGCAAGGACATTTTATG GGATCCCTTCTCAAGAGTTTCTATGTTTCGTTAAG	minigene
<i>IL36R Exon 3</i>	GGATCCGTGGATGCTTAGTGCTTTGTTAGAGGCAGAG GATATCCTTTACCAATTCTGCCTTAAAAAATACAAC	minigene
<i>IL36R Exon 4</i>	GATATCGTCTTCCAGTTAGACTGTAAATTACCTAAATAC CTCGAGTAATGCTCACAGTGATGCCATTTAAACCTCG	minigene
<i>E4 mutant F1</i>	GGATCCGTGGATGCTTAGTGCTTTGTTAGAGGCAGAG	ESE deletion minigene
<i>E4 mutant R1</i>	CTCGAGTAATGCTCACAGTGATGCCATTTAAACCTCG	ESE deletion minigene
<i>E4 mutant F2</i>	AATGTCTCGGAACCTACGCGT	ESE deletion minigene
<i>E4 mutant R2</i>	ACGCGTAGTTCCGAGACATT	ESE deletion minigene
<i>SF2</i>	GCGAATTCATGTCGGGAGGTGGTGTGATTCTG GCCTCGAGTTACTTATCGTCGTCATCCTTGTAATCTGTAC GAGAGCGAGATCTGCTATG	Clone
<i>HA-DDX5</i>	GGCTCGAGATGTCGGGTTATTCGAGTGACCG CCGGATCCTTATTGGGAATATCCTGTTGGC	Clone
<i>4Flag-DDX5</i>	CCGGATCCATGTCGGGTTATTCGAGTGACCG CCCTCGAGTTATTGGGAATATCCTGTTGGC	Clone
<i>hIL36R</i>	GGCTCGAGATGTGGTCCTTGCTGCTCTGCGG CCGGATCCTTAGCCAGTCGTGAGAGTACAC	Clone
<i>hsIL36R</i>	GTGCTCGAGGTATGTGGTCCTTGCTGCTCTG GCGGATCCAAAAGCCTGGTTTCCAAAACAGTG	Clone
<i>mIl36R</i>	CCGCTCGAGGGGGTTACATCTTTGC CGCGCTAGCTCAGGGAGTTATGAGCCC	Clone
<i>msIl36R</i>	GCGGATCCATGTGGTCCTTGCTGCTCTGCGGGTTG CCCTCGAGCCAAAAGCCTGGTTTCCAAAACAG	Clone

Table 4. *P* values and sample size for RT-PCR, ELISA and FACS

Fig. 1a		
Normal vs AD	$p=0.0021$	Normal $n=38$, AD $n=27$
Normal vs PSO	$p<0.0001$	Normal $n=38$, Psoriasis $n=28$
Fig. 1g		
Keratinocytes	Healthy vs AD lesion	$p<0.0001$ Healthy $n=51938$, AD lesion $n=11255$
	Healthy vs AD no lesion	$p<0.0001$ Healthy $n=51938$, AD no lesion $n=20238$
	Healthy vs Pso lesion	$p<0.0001$ Healthy $n=51938$, Pso lesion $n=12978$
	Healthy vs Pso no lesion	$p<0.0001$ Healthy $n=51938$, Pso no lesion $n=21064$
Fibroblasts	Healthy vs AD lesion	$p<0.0001$ Healthy $n=17312$, AD lesion $n=10028$
	Healthy vs AD no lesion	$p<0.0001$ Healthy $n=17312$, AD no lesion $n=7337$
	Healthy vs Pso lesion	$p<0.0001$ Healthy $n=17312$, Pso lesion $n=12029$
	Healthy vs Pso no lesion	$p<0.0001$ Healthy $n=17312$, Pso no lesion $n=14206$
Lymphocytes	Healthy vs AD lesion	$p<0.0001$ Healthy $n=41756$, AD lesion $n=18649$
	Healthy vs AD no lesion	$p<0.0001$ Healthy $n=41756$, AD no lesion $n=10732$
	Healthy vs Pso lesion	$p<0.0001$ Healthy $n=41756$, Pso lesion $n=17592$
	Healthy vs Pso no lesion	$p=0.0186$ Healthy $n=41756$, Pso no lesion $n=5188$
Fig. 1l		
<i>Il4</i>	$p=0.0125$	<i>Ddx5^{fl/fl}</i> $n=5$, <i>Ddx5^{Δ/kc}</i> $n=5$
<i>Il13</i>	$p=0.0111$	<i>Ddx5^{fl/fl}</i> $n=5$, <i>Ddx5^{Δ/kc}</i> $n=5$
<i>Tslp</i>	$p=0.0605$	<i>Ddx5^{fl/fl}</i> $n=5$, <i>Ddx5^{Δ/kc}</i> $n=5$
<i>Ccl11</i>	$p=0.0012$	<i>Ddx5^{fl/fl}</i> $n=5$, <i>Ddx5^{Δ/kc}</i> $n=5$
<i>Ccl17</i>	$p=0.0073$	<i>Ddx5^{fl/fl}</i> $n=5$, <i>Ddx5^{Δ/kc}</i> $n=5$
<i>Ccl22</i>	$p=0.0019$	<i>Ddx5^{fl/fl}</i> $n=5$, <i>Ddx5^{Δ/kc}</i> $n=5$
Fig. 1m		
CD45 ⁺ cells in ear (%)	$p=0.0002$	<i>Ddx5^{fl/fl}</i> $n=6$, <i>Ddx5^{Δ/kc}</i> $n=6$
CD45 ⁺ cells/5x10 ⁴ cells (x10 ³)	$p=0.0003$	<i>Ddx5^{fl/fl}</i> $n=6$, <i>Ddx5^{Δ/kc}</i> $n=6$
Eosinophils in ear (%)	$p=0.0227$	<i>Ddx5^{fl/fl}</i> $n=6$, <i>Ddx5^{Δ/kc}</i> $n=6$
Eosinophils/5x10 ⁴ cells (x10 ³)	$p=0.0004$	<i>Ddx5^{fl/fl}</i> $n=6$, <i>Ddx5^{Δ/kc}</i> $n=6$

Basophils in ear (%)	$p=0.0364$	$Ddx5^{fl/fl}$ $n=6$, $Ddx5^{\Delta/kc}$ $n=6$
Basophils/ 5×10^4 cells ($\times 10^2$)	$p=0.0003$	$Ddx5^{fl/fl}$ $n=6$, $Ddx5^{\Delta/kc}$ $n=6$
CD4 ⁺ T cells in ear (%)	$p=0.0014$	$Ddx5^{fl/fl}$ $n=6$, $Ddx5^{\Delta/kc}$ $n=6$
CD4 ⁺ T cells/ 5×10^4 cells ($\times 10^2$)	$p=0.0005$	$Ddx5^{fl/fl}$ $n=6$, $Ddx5^{\Delta/kc}$ $n=6$
Fig. 2a		
DDX5-8h vs 0h	$p=0.1599$	$n=3$
DDX5-16h vs 0h	$p=0.0074$	$n=3$
DDX5-24h vs 0h	$p=0.0035$	$n=3$
DDX5-32h vs 0h	$p=0.0321$	$n=3$
DDX5-40h vs 0h	$p=0.0280$	$n=3$
Fig. 2g		
<i>Il4</i>	$p=0.0418$	$Ddx5^{fl/fl}$ $n=5$, $Ddx5^{\Delta/kc}$ $n=5$
<i>Il13</i>	$p=0.0220$	$Ddx5^{fl/fl}$ $n=5$, $Ddx5^{\Delta/kc}$ $n=5$
<i>Tslp</i>	$p=0.1448$	$Ddx5^{fl/fl}$ $n=5$, $Ddx5^{\Delta/kc}$ $n=5$
<i>Ccl11</i>	$p=0.0156$	$Ddx5^{fl/fl}$ $n=5$, $Ddx5^{\Delta/kc}$ $n=5$
<i>Ccl17</i>	$p=0.0435$	$Ddx5^{fl/fl}$ $n=5$, $Ddx5^{\Delta/kc}$ $n=5$
<i>Ccl22</i>	$p=0.0946$	$Ddx5^{fl/fl}$ $n=5$, $Ddx5^{\Delta/kc}$ $n=5$
Fig. 2h		
CD45 ⁺ cells in ear (%)	$p=0.0228$	WT $n=5$, <i>Il17d</i> ^{-/-} $n=5$
CD45 ⁺ cells/ 10^5 cells ($\times 10^4$)	$p=0.0238$	WT $n=5$, <i>Il17d</i> ^{-/-} $n=5$
Eosinophils in ear (%)	$p=0.0267$	WT $n=5$, <i>Il17d</i> ^{-/-} $n=5$
Eosinophils/ 10^5 cells ($\times 10^2$)	$p=0.0187$	WT $n=5$, <i>Il17d</i> ^{-/-} $n=5$
Basophils in ear (%)	$p<0.0001$	WT $n=5$, <i>Il17d</i> ^{-/-} $n=5$
Basophils/ 10^5 cells ($\times 10^2$)	$p<0.0001$	WT $n=5$, <i>Il17d</i> ^{-/-} $n=5$
CD4 ⁺ T cells in ear (%)	$p=0.0001$	WT $n=5$, <i>Il17d</i> ^{-/-} $n=5$
CD4 ⁺ T cells/ 10^5 cells ($\times 10^2$)	$p=0.0050$	WT $n=5$, <i>Il17d</i> ^{-/-} $n=5$
Fig. 3b		
<i>Il4</i>	$p=0.044$	WT $n=7$, <i>Cd93</i> ^{-/-} $n=7$
<i>Il13</i>	$p=0.0086$	WT $n=7$, <i>Cd93</i> ^{-/-} $n=7$
<i>Tslp</i>	$p=0.3549$	WT $n=7$, <i>Cd93</i> ^{-/-} $n=7$
<i>Ccl11</i>	$p=0.0141$	WT $n=7$, <i>Cd93</i> ^{-/-} $n=7$
<i>Ccl17</i>	$p=0.0041$	WT $n=7$, <i>Cd93</i> ^{-/-} $n=7$
<i>Ccl22</i>	$p=0.0080$	WT $n=7$, <i>Cd93</i> ^{-/-} $n=7$
Fig. 3e		
DDX5		
DMSO vs iSTAT3	$p=0.9854$	$n=3$
DMSO vs iP38	$p=0.5576$	$n=3$
DMSO vs iPI3K	$p<0.0001$	$n=3$
DMSO vs iMEK	$p=0.0019$	$n=3$
DMSO vs iJNK	$p=0.0002$	$n=3$
DMSO vs iPPAR γ	$p<0.0001$	$n=3$
DMSO vs iNF κ B	$p=0.1665$	$n=3$
DMSO vs iSMAD2/3	$p=0.1370$	$n=3$

DMSO vs iAKT1/2		$p<0.0001$	$n=3$
DMSO vs IL-17D		$p<0.0001$	$n=3$
IL-17D vs IL-17D+iSTAT3		$p>0.9999$	$n=3$
IL-17D vs IL-17D+iP38		$p<0.0001$	$n=3$
IL-17D vs IL-17D+iPI3K		$p>0.9999$	$n=3$
IL-17D vs IL-17D+iMEK		$p=0.4616$	$n=3$
IL-17D vs IL-17D+iJNK		$p<0.0001$	$n=3$
IL-17D vs IL-17D+iPPAR γ		$p=0.4568$	$n=3$
IL-17D vs IL-17D+iNF κ B		$p=0.3549$	$n=3$
IL-17D vs IL-17D+iSMAD2/3		$p=0.0292$	$n=3$
IL-17D vs IL-17D+iAKT1/2		$p=0.0003$	$n=3$
Fig. 4c			
CCL11	0h:WT vs 0h:DDX5 ^{-/-}	$p=0.0435$	$n=3$
	0h:DDX5 ^{-/-} vs 6h:DDX5 ^{-/-}	$p=0.0197$	$n=3$
	6h:WT vs 6h:DDX5 ^{-/-}	$p=0.0002$	$n=3$
	6h:DDX5 ^{-/-} vs 6h:DDX5 ^{-/-} siIL-36R	$p=0.0003$	$n=3$
CCL17	0h:WT vs 0h:DDX5 ^{-/-}	$p=0.8089$	$n=3$
	0h:DDX5 ^{-/-} vs 6h:DDX5 ^{-/-}	$p=0.0004$	$n=3$
	6h:WT vs 6h:DDX5 ^{-/-}	$p=0.0023$	$n=3$
	6h:DDX5 ^{-/-} vs 6h:DDX5 ^{-/-} + siIL-36R	$p=0.0156$	$n=3$
CCL22	0h:WT vs 0h:DDX5 ^{-/-}	$p=0.9492$	$n=3$
	0h:DDX5 ^{-/-} vs 6h:DDX5 ^{-/-}	$p=0.0013$	$n=3$
	6h:WT vs 6h:DDX5 ^{-/-}	$p=0.0159$	$n=3$
	6h:DDX5 ^{-/-} vs 6h:DDX5 ^{-/-} + siIL-36R	$p=0.0072$	$n=3$
Fig. 4d			
CCL20	0h:WT vs 2h:WT	$p<0.0001$	$n=3$
	0h:DDX5 ^{-/-} vs 2h:DDX5 ^{-/-}	$p<0.0001$	$n=3$
	6h:WT vs 2h:DDX5 ^{-/-}	$p=0.0001$	$n=3$
	6h:DDX5 ^{-/-} vs 2h:DDX5 ^{-/-} siIL-36R	$p<0.0001$	$n=3$
CXCL1	0h:WT vs 2h:WT	$p<0.0001$	$n=3$
	0h:DDX5 ^{-/-} vs 2h:DDX5 ^{-/-}	$p<0.0001$	$n=3$
	2h:WT vs 2h:DDX5 ^{-/-}	$p<0.0001$	$n=3$
	2h:DDX5 ^{-/-} vs 2h:DDX5 ^{-/-} siIL-36R	$p<0.0001$	$n=3$
CXCL2	0h:WT vs 2h:WT	$p<0.0001$	$n=3$
	0h:DDX5 ^{-/-} vs 2h:DDX5 ^{-/-}	$p<0.0001$	$n=3$
	2h:WT vs 2h:DDX5 ^{-/-}	$p<0.0001$	$n=3$
	2h:DDX5 ^{-/-} vs 2h:DDX5 ^{-/-} siIL-36R	$p<0.0001$	$n=3$
Fig. 4e			
hIL36R	WT vs DDX5 ^{-/-}	$p<0.0001$	$n=9$
Fig. 4f			
mIl36R	WT vs Ddx5 ^{-/-}	$p=0.0012$	$n=3$
Fig. 7c			
CCL20	Blank:EV vs. IL-36 γ :EV	$p<0.0001$	$n=3$

	Blank:sIL-36R vs. IL-36γ:sIL-36R	$p=0.0001$	$n=3$
	IL-36γ:EV vs. IL-36γ:sIL-36R	$p<0.0001$	$n=3$
CXCL1	Blank:EV vs. IL-36γ:EV	$p<0.0001$	$n=3$
	Blank:sIL-36R vs. IL-36γ:sIL-36R	$p<0.0001$	$n=3$
	IL-36γ:EV vs. IL-36γ:sIL-36R	$p<0.0001$	$n=3$
CXCL2	Blank:EV vs. IL-36γ:EV	$p<0.0001$	$n=3$
	Blank:sIL-36R vs. IL-36γ:sIL-36R	$p=0.0010$	$n=3$
	IL-36γ:EV vs. IL-36γ:sIL-36R	$p<0.0001$	$n=3$
CCL3	Blank:EV vs. IL-36γ:EV	$p<0.0001$	$n=3$
	Blank:sIL-36R vs. IL-36γ:sIL-36R	$p=0.0011$	$n=3$
	IL-36γ:EV vs. IL-36γ:sIL-36R	$p<0.0001$	$n=3$
CCL17	Blank:EV vs. IL-36γ:EV	$p<0.0001$	$n=3$
	Blank:sIL-36R vs. IL-36γ:sIL-36R	$p<0.0001$	$n=3$
	IL-36γ:EV vs. IL-36γ:sIL-36R	$p<0.0001$	$n=3$
CCL27	Blank:EV vs. IL-36γ:EV	$p=0.0007$	$n=3$
	Blank:sIL-36R vs. IL-36γ:sIL-36R	$p=0.0607$	$n=3$
	IL-36γ:EV vs. IL-36γ:sIL-36R	$p=0.0071$	$n=3$
Fig. 7d			
PBS vs sIL-36R		$p<0.0001$	PBS $n=5$, sIL-36R $n=5$
Fig. 7e			
Il4		$p=0.0189$	PBS $n=5$, sIL-36R $n=5$
Il13		$p=0.0010$	PBS $n=5$, sIL-36R $n=5$
Tslp		$p=0.0022$	PBS $n=5$, sIL-36R $n=5$
Ccl11		$p=0.0114$	PBS $n=5$, sIL-36R $n=5$
Ccl17		$p=0.0110$	PBS $n=5$, sIL-36R $n=5$
Fig. 7f			
CD45 ⁺ cells in ear (%)		$p=0.0376$	PBS $n=5$, sIL-36R $n=5$
CD45 ⁺ cells/10 ⁵ cells (x10 ³)		$p=0.0010$	PBS $n=5$, sIL-36R $n=5$
Eosinophils in ear (%)		$p<0.0001$	PBS $n=5$, sIL-36R $n=5$
Eosinophils/10 ⁵ cells (x10 ²)		$p=0.0001$	PBS $n=5$, sIL-36R $n=5$
Basophils in ear (%)		$p=0.5654$	PBS $n=5$, sIL-36R $n=5$
Basophils/10 ⁵ cells (x10 ²)		$p<0.0001$	PBS $n=5$, sIL-36R $n=5$
CD4 ⁺ T cells in ear (%)		$p=0.0147$	PBS $n=5$, sIL-36R $n=5$
CD4 ⁺ T cells/10 ⁵ cells (x10 ³)		$p=0.0088$	PBS $n=5$, sIL-36R $n=5$
Fig. 8a			
PBS vs sIL-36R		$p<0.0001$	PBS $n=4$, sIL-36R $n=4$
Fig. 8b			
PBS vs sIL-36R		$p=0.0005$	PBS $n=10$, sIL-36R $n=10$
Fig. 8c			
IL-4		$p=0.0029$	PBS $n=4$, sIL-36R $n=4$
IL-13		$p=0.0005$	PBS $n=4$, sIL-36R $n=4$
TSLP		$p=0.0014$	PBS $n=4$, sIL-36R $n=4$
Fig. 8d			

<i>Ccl11</i>	<i>p</i> =0.0255	PBS <i>n</i> =4, sIL-36R <i>n</i> =4	
<i>Ccl17</i>	<i>p</i> =0.0243	PBS <i>n</i> =4, sIL-36R <i>n</i> =4	
<i>Ccl17</i>	<i>p</i> =0.0215	PBS <i>n</i> =4, sIL-36R <i>n</i> =4	
Fig. 8e			
CCL20	<i>p</i> <0.0001	PBS <i>n</i> =7, sIL-36R <i>n</i> =7	
CXCL1	<i>p</i> <0.0001	PBS <i>n</i> =7, sIL-36R <i>n</i> =7	
IL-23	<i>p</i> <0.0001	PBS <i>n</i> =7, sIL-36R <i>n</i> =7	
IL-17A	<i>p</i> <0.0001	PBS <i>n</i> =7, sIL-36R <i>n</i> =7	
IL-17F	<i>p</i> =0.0004	PBS <i>n</i> =7, sIL-36R <i>n</i> =7	
TNF	<i>p</i> =0.0005	PBS <i>n</i> =7, sIL-36R <i>n</i> =7	
Fig. 8f			
<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc}	<i>p</i> <0.0001	<i>Ddx5</i> ^{fl/fl} <i>n</i> =8, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =8	
<i>Ddx5</i> ^{Δ/kc} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> <0.0001	<i>Ddx5</i> ^{Δ/kc} <i>n</i> =8, <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc} <i>n</i> =8	
<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> =0.9444	<i>Ddx5</i> ^{fl/fl} <i>n</i> =8, <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc} <i>n</i> =8	
Fig. 8g			
IL-4	<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc}	<i>p</i> =0.0005	<i>Ddx5</i> ^{fl/fl} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =4
	<i>Ddx5</i> ^{Δ/kc} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> =0.0004	<i>Ddx5</i> ^{Δ/kc} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc} <i>n</i> =4
IL-13	<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc}	<i>p</i> =0.0071	<i>Ddx5</i> ^{fl/fl} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =4
	<i>Ddx5</i> ^{Δ/kc} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> =0.0002	<i>Ddx5</i> ^{Δ/kc} , <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc} <i>n</i> =4
TSLP	<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc}	<i>p</i> <0.0001	<i>Ddx5</i> ^{fl/fl} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =4
	<i>Ddx5</i> ^{Δ/kc} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> <0.0001	<i>Ddx5</i> ^{Δ/kc} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc} <i>n</i> =4
Fig. 8h			
<i>Ccl11</i>	<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc}	<i>p</i> =0.0079	<i>Ddx5</i> ^{fl/fl} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =4
	<i>Ddx5</i> ^{Δ/kc} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> =0.0076	<i>Ddx5</i> ^{Δ/kc} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc} <i>n</i> =4
<i>Ccl17</i>	<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc}	<i>p</i> =0.0002	<i>Ddx5</i> ^{fl/fl} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =4
	<i>Ddx5</i> ^{Δ/kc} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> =0.0001	<i>Ddx5</i> ^{Δ/kc} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc} <i>n</i> =4
<i>Ccl22</i>	<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc}	<i>p</i> =0.0006	<i>Ddx5</i> ^{fl/fl} <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =4
	<i>Ddx5</i> ^{Δ/kc} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> =0.0340	<i>Ddx5</i> ^{Δ/kc} , <i>n</i> =4, <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc} <i>n</i> =4
Fig. 8i			
<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc}	<i>p</i> <0.0001	<i>Ddx5</i> ^{fl/fl} <i>n</i> =8, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =8	
<i>Ddx5</i> ^{Δ/kc} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> <0.0001	<i>Ddx5</i> ^{fl/fl} <i>n</i> =8, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =8	
<i>Ddx5</i> ^{fl/fl} vs <i>Ddx5</i> ^{Δ/kc} sIL36R ^{Tg/kc}	<i>p</i> <0.0001	<i>Ddx5</i> ^{fl/fl} <i>n</i> =8, <i>Ddx5</i> ^{Δ/kc} <i>n</i> =8	
Fig. 8j			

CCL20	<i>Ddx5^{fl/fl}</i> vs <i>Ddx5^{Δ/kc}</i>	<i>p</i> <0.0001	<i>Ddx5^{fl/fl}</i> <i>n</i> =4, <i>Ddx5^{Δ/kc}</i> <i>n</i> =4
	<i>Ddx5^{Δ/kc}</i> vs <i>Ddx5^{Δ/kc}sIL36R^{Tg/kc}</i>	<i>p</i> =0.0004	<i>Ddx5^{Δ/kc}</i> <i>n</i> =4, <i>Ddx5^{Δ/kc}sIL36R^{Tg/kc}</i> <i>n</i> =4
CXCL1	<i>Ddx5^{fl/fl}</i> vs <i>Ddx5^{Δ/kc}</i>	<i>p</i> <0.0001	<i>Ddx5^{fl/fl}</i> , <i>n</i> =4, <i>Ddx5^{Δ/kc}</i> , <i>n</i> =4
	<i>Ddx5^{Δ/kc}</i> vs <i>Ddx5^{Δ/kc}sIL36R^{Tg/kc}</i>	<i>p</i> =0.0006	<i>Ddx5^{Δ/kc}</i> <i>n</i> =4, <i>Ddx5^{Δ/kc}sIL36R^{Tg/kc}</i> <i>n</i> =4
IL-23	<i>Ddx5^{fl/fl}</i> vs <i>Ddx5^{Δ/kc}</i>	<i>p</i> =0.0002	<i>Ddx5^{fl/fl}</i> <i>n</i> =4, <i>Ddx5^{Δ/kc}</i> <i>n</i> =4
	<i>Ddx5^{Δ/kc}</i> vs <i>Ddx5^{Δ/kc}sIL36R^{Tg/kc}</i>	<i>p</i> =0.0002	<i>Ddx5^{Δ/kc}</i> <i>n</i> =4, <i>Ddx5^{Δ/kc}sIL36R^{Tg/kc}</i> <i>n</i> =4
IL-17A	<i>Ddx5^{fl/fl}</i> vs <i>Ddx5^{Δ/kc}</i>	<i>p</i> <0.0001	<i>Ddx5^{fl/fl}</i> <i>n</i> =4, <i>Ddx5^{Δ/kc}</i> <i>n</i> =4
	<i>Ddx5^{Δ/kc}</i> vs <i>Ddx5^{Δ/kc}sIL36R^{Tg/kc}</i>	<i>p</i> <0.0001	<i>Ddx5^{Δ/kc}</i> <i>n</i> =4, <i>Ddx5^{Δ/kc}sIL36R^{Tg/kc}</i> <i>n</i> =4
Extended Data Fig.1b			
<i>CDC5L</i>	PSO Ctrl vs PSO Lesion	<i>p</i> =0.2822	PSO Ctrl <i>n</i> =4, PSO Lesion <i>n</i> =4
	AD Ctrl vs AD Lesion	<i>p</i> =0.5343	AD Ctrl <i>n</i> =4, AD Lesion <i>n</i> =4
<i>PRPF18</i>	PSO Ctrl vs PSO Lesion	<i>p</i> =0.3837	PSO Ctrl <i>n</i> =4, PSO Lesion <i>n</i> =4
	AD Ctrl vs AD Lesion	<i>p</i> =0.9103	AD Ctrl <i>n</i> =4, AD Lesion <i>n</i> =4
<i>DHX8</i>	PSO Ctrl vs PSO Lesion	<i>p</i> =0.0620	PSO Ctrl <i>n</i> =4, PSO Lesion <i>n</i> =4
	AD Ctrl vs AD Lesion	<i>p</i> =0.9387	AD Ctrl <i>n</i> =4, AD Lesion <i>n</i> =4
<i>DHX15</i>	PSO Ctrl vs PSO Lesion	<i>p</i> =0.5744	PSO Ctrl <i>n</i> =4, PSO Lesion <i>n</i> =4
	AD Ctrl vs AD Lesion	<i>p</i> =0.0391	AD Ctrl <i>n</i> =4, AD Lesion <i>n</i> =4
<i>HNRNP<i>a</i>1</i>	PSO Ctrl vs PSO Lesion	<i>p</i> =0.9292	PSO Ctrl <i>n</i> =4, PSO Lesion <i>n</i> =4
	AD Ctrl vs AD Lesion	<i>p</i> =0.8885	AD Ctrl <i>n</i> =4, AD Lesion <i>n</i> =4
<i>SRSF1</i>	PSO Ctrl vs PSO Lesion	<i>p</i> > 0.9999	PSO Ctrl <i>n</i> =4, PSO Lesion <i>n</i> =4
	AD Ctrl vs AD Lesion	<i>p</i> =0.0001	AD Ctrl <i>n</i> =4, AD Lesion <i>n</i> =4
Extended Data Fig.1d			
<i>Ddx5</i>	Day0 vs Day4	<i>p</i> =0.0012	Day0 <i>n</i> =4, Day4 <i>n</i> =3
	Day0 vs Day8	<i>p</i> =0.0169	Day0 <i>n</i> =4, Day8 <i>n</i> =3
	Day0 vs Day12	<i>p</i> =0.0023	Day0 <i>n</i> =4, Day12 <i>n</i> =3
	Day0 vs Day16	<i>p</i> =0.0214	Day0 <i>n</i> =4, Day16 <i>n</i> =3
Extended Data Fig.1e			
<i>Ddx5</i>	Day0 vs Day1	<i>p</i> =0.0272	Day0 <i>n</i> =3, Day1 <i>n</i> =3
	Day0 vs Day2	<i>p</i> =0.0277	Day0 <i>n</i> =3, Day2 <i>n</i> =3
	Day0 vs Day3	<i>p</i> =0.0084	Day0 <i>n</i> =3, Day3 <i>n</i> =3
	Day0 vs Day4	<i>p</i> =0.0177	Day0 <i>n</i> =3, Day4 <i>n</i> =3
	Day0 vs Day5	<i>p</i> =0.0034	Day0 <i>n</i> =3, Day5 <i>n</i> =3

Extended Data Fig. 2b		
<i>Ddx5^{fl/fl}</i> vs <i>Ddx5^{Δ/kc}</i>	<i>p</i> =0.0019	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
Extended Data Fig. 2d		
<i>Ddx5^{fl/fl}</i> vs <i>Ddx5^{Δ/kc}</i>	<i>p</i> =0.0004	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
Extended Data Fig. 2e		
<i>Il23</i>	<i>p</i> =0.0117	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
<i>Il17a</i>	<i>p</i> =0.0020	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
<i>Ccl20</i>	<i>p</i> =0.0425	<i>Ddx5^{fl/f}</i> , <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
<i>Cxcl1</i>	<i>p</i> =0.0378	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
<i>Cxcl2</i>	<i>p</i> =0.0246	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
<i>S100a7</i>	<i>p</i> =0.0027	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
Extended Data Fig. 2f		
CD45 ⁺ cells in skin (%)	<i>p</i> <0.0001	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
CD45 ⁺ cells/10 ⁵ cells (x10 ⁴)	<i>p</i> =0.0003	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
Neutrophils in skin (%)	<i>p</i> =0.0485	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
Neutrophils/10 ⁵ cells (x10 ²)	<i>p</i> =0.0024	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
MHCII ⁺ antigen-presenting cell in skin (%)	<i>p</i> =0.0006	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
MHCII ⁺ antigen-presenting cell/10 ⁵ cells (x10 ²)	<i>p</i> =0.0003	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
CD3 ⁺ γδT ⁺ cells in skin (%)	<i>p</i> =0.0130	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
CD3 ⁺ γδT ⁺ cells/10 ⁵ cells (x10 ²)	<i>p</i> =0.0016	<i>Ddx5^{fl/fl}</i> <i>n</i> =5, <i>Ddx5^{Δ/kc}</i> <i>n</i> =5
Extended Data Fig. 3a		
TNF		
0ng/mL vs 20ng/mL	<i>p</i> =0.0509	<i>n</i> =2
0ng/mL vs 40ng/mL	<i>p</i> =0.0779	<i>n</i> =2
0ng/mL vs 60ng/mL	<i>p</i> =0.4187	<i>n</i> =2
0ng/mL vs 80ng/mL	<i>p</i> =0.4027	<i>n</i> =2
0ng/mL vs 100ng/mL	<i>p</i> =0.1596	<i>n</i> =2
IL-1β		
0ng/mL vs 20ng/mL	<i>p</i> >0.9999	<i>n</i> =3
0ng/mL vs 40ng/mL	<i>p</i> =0.3841	<i>n</i> =3
0ng/mL vs 60ng/mL	<i>p</i> =0.7999	<i>n</i> =3
0ng/mL vs 80ng/mL	<i>p</i> =0.3296	<i>n</i> =3
0ng/mL vs 100ng/mL	<i>p</i> =0.6662	<i>n</i> =3
IL-36γ		
0ng/mL vs 20ng/mL	<i>p</i> =0.8200	<i>n</i> =3
0ng/mL vs 40ng/mL	<i>p</i> =0.5913	<i>n</i> =3
0ng/mL vs 60ng/mL	<i>p</i> =0.9722	<i>n</i> =3
0ng/mL vs 80ng/mL	<i>p</i> =0.9402	<i>n</i> =3
0ng/mL vs 100ng/mL	<i>p</i> =0.8876	<i>n</i> =3
IL-4		
0ng/mL vs 20ng/mL	<i>p</i> =0.9955	<i>n</i> =3

0ng/mL vs 40ng/mL	$p=0.6971$	$n=3$
0ng/mL vs 60ng/mL	$p=0.3423$	$n=3$
0ng/mL vs 80ng/mL	$p=0.6748$	$n=3$
0ng/mL vs 100ng/mL	$p=0.9802$	$n=3$
IL-13		
0ng/mL vs 20ng/mL	$p=0.2427$	$n=3$
0ng/mL vs 40ng/mL	$p=0.2895$	$n=3$
0ng/mL vs 60ng/mL	$p=0.0489$	$n=3$
0ng/mL vs 80ng/mL	$p=0.7662$	$n=3$
0ng/mL vs 100ng/mL	$p=0.9821$	$n=3$
IL-17A		
0nM vs 0.46nM	$p=0.9998$	$n=3$
0nM vs 0.91nM	$p=0.8805$	$n=3$
0nM vs 1.38nM	$p=0.4236$	$n=3$
0nM vs 1.84nM	$p=0.9536$	$n=3$
0nM vs 2.30nM	$p=0.4558$	$n=3$
IL-17B		
0nM vs 0.46nM	$p=0.0037$	$n=3$
0nM vs 0.91nM	$p=0.0385$	$n=3$
0nM vs 1.38nM	$p=0.0811$	$n=3$
0nM vs 1.84nM	$p=0.3786$	$n=3$
0nM vs 2.30nM	$p=0.0095$	$n=3$
IL-17C		
0nM vs 0.46nM	$p=0.9961$	$n=3$
0nM vs 0.91nM	$p=0.8707$	$n=3$
0nM vs 1.38nM	$p=0.9623$	$n=3$
0nM vs 1.84nM	$p=0.4608$	$n=3$
0nM vs 2.30nM	$p=0.9980$	$n=3$
IL-17E		
0nM vs 0.46nM	$p=0.1900$	$n=3$
0nM vs 0.91nM	$p=0.0014$	$n=3$
0nM vs 1.38nM	$p=0.1833$	$n=3$
0nM vs 1.84nM	$p=0.0207$	$n=3$
0nM vs 2.30nM	$p=0.0021$	$n=3$
IL-17F		
0nM vs 0.46nM	$p=0.9432$	$n=3$
0nM vs 0.91nM	$p=0.9999$	$n=3$
0nM vs 1.38nM	$p=0.8687$	$n=3$
0nM vs 1.84nM	$p=0.6466$	$n=3$
0nM vs 2.30nM	$p=0.6246$	$n=3$
Extended Data Fig.4e		
CD45 ⁺ cells in ear (%)	$p=0.0022$	WT $n=5$, $Il17d^{-/-}$ $n=5$
CD45 ⁺ cells/ 10^5 cells ($\times 10^3$)	$p=0.0006$	WT $n=5$, $Il17d^{-/-}$ $n=5$

Extended Data Fig.5c		
<i>Cxcl1</i>	<i>p</i> =0.0613	WT <i>n</i> =5, <i>Cd93</i> ^{-/-} <i>n</i> =4
<i>Cxcl2</i>	<i>p</i> =0.0003	WT <i>n</i> =5, <i>Cd93</i> ^{-/-} <i>n</i> =4
<i>Ccl20</i>	<i>p</i> =0.0019	WT <i>n</i> =5, <i>Cd93</i> ^{-/-} <i>n</i> =4
<i>Il17a</i>	<i>p</i> =0.0978	WT <i>n</i> =5, <i>Cd93</i> ^{-/-} <i>n</i> =4
<i>Il23</i>	<i>p</i> =0.0195	WT <i>n</i> =5, <i>Cd93</i> ^{-/-} <i>n</i> =4
<i>Il36g</i>	<i>p</i> =0.0008	WT <i>n</i> =5, <i>Cd93</i> ^{-/-} <i>n</i> =4
Extended Data Fig.5d		
NC vs siCD93	<i>p</i> =0.7207	NC <i>n</i> =3, siCD93 <i>n</i> =3
Con vs IL-17D	<i>p</i> =0.0075	Con <i>n</i> =3, IL-17D <i>n</i> =3
IL-17D vs IL-17D+siCD93	<i>p</i> =0.0136	IL-17D <i>n</i> =3, IL-17D+siCD93 <i>n</i> =3
siCD93 vs IL-17D+siCD93	<i>p</i> = 0.9292	siCD93 <i>n</i> =3, IL-17D+siCD93 <i>n</i> =3
Extended Data Fig.6a		
<i>CCL20</i>		
IL-17A 0h	<i>p</i> =0.9738	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 2h	<i>p</i> =0.0197	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 4h	<i>p</i> >0.9999	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 6h	<i>p</i> =0.2933	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 8h	<i>p</i> =0.2269	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 10h	<i>p</i> >0.9999	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
<i>CXCL1</i>		
IL-17A 0h	<i>p</i> =0.9982	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 2h	<i>p</i> <0.0001	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 4h	<i>p</i> =0.1554	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 6h	<i>p</i> =0.5333	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 8h	<i>p</i> =0.8002	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 10h	<i>p</i> =0.9785	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
<i>CXCL2</i>		
IL-17A 0h	<i>p</i> =0.5146	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 2h	<i>p</i> <0.0001	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 4h	<i>p</i> <0.0001	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 6h	<i>p</i> >0.9999	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 8h	<i>p</i> =0.9952	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 10h	<i>p</i> =0.7198	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
<i>CXCL6</i>		
IL-17A 0h	<i>p</i> = 0.5895	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 2h	<i>p</i> =0.9998	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 4h	<i>p</i> =0.9358	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 6h	<i>p</i> =0.3523	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 8h	<i>p</i> =0.9831	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3
IL-17A 10h	<i>p</i> <0.0001	WT <i>n</i> =3, <i>DDX5</i> ^{-/-} <i>n</i> =3

<i>CCL3</i>		
IL-17A 0h	$p=0.0773$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 2h	$p=0.1303$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 4h	$p=0.9993$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 6h	$p>0.9999$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 8h	$p=0.0231$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 10h	$p=0.1852$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL17</i>		
IL-17A 0h	$p=0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL22</i>		
IL-17A 0h	$p=0.0077$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 4h	$p=0.7368$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 6h	$p=0.4774$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 8h	$p=0.4204$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-17A 10h	$p=0.0036$	WT $n=3$, $DDX5^{-/-}$ $n=3$
Extended Data Fig.6b		
<i>CCL20</i>		
IL-36 γ 0h	$p=0.1678$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL1</i>		
IL-36 γ 0h	$p=0.2393$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 10h	$p=0.0010$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL2</i>		
IL-36 γ 0h	$p=0.0288$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36 γ 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$

<i>CXCL6</i>		
IL-36γ 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL3</i>		
IL-36γ 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL17</i>		
IL-36γ 0h	$p=0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 8h	$p=0.0005$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL22</i>		
IL-36γ 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 8h	$p=0.1585$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-36γ 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
Extended Data Fig.6c		
<i>CCL20</i>		
TNF 0h	$p=>0.9999$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 4h	$p=0.6848$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 6h	$p=0.9913$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 8h	$p=0.9997$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 10h	$p=0.9915$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL1</i>		
TNF 0h	$p>0.9999$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 2h	$p=0.9342$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 4h	$p=0.0029$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 6h	$p=0.0640$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 8h	$p=0.0078$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 10h	$p=0.2654$	WT $n=3$, $DDX5^{-/-}$ $n=3$

<i>CXCL2</i>		
TNF 0h	$p=0.9476$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 4h	$p=0.0023$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 6h	$p=0.0399$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 8h	$p=0.2822$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 10h	$p=0.0480$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL6</i>		
TNF 0h	$p=0.1220$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 10h	$p=0.0002$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL3</i>		
TNF 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL17</i>		
TNF 0h	$p=0.2165$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 10h	$P=0.0416$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL22</i>		
TNF 0h	$p=0.0911$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
TNF 10h	$p=0.0009$	WT $n=3$, $DDX5^{-/-}$ $n=3$
Extended Data Fig.6d		
<i>CCL20</i>		
IL-25 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$

<i>CXCL1</i>		
IL-25 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL2</i>		
IL-25 0h	$P=0.0067$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL6</i>		
IL-25 0h	$P=0.0067$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 6h	$P=0.0133$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 10h	$P=0.0004$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL3</i>		
IL-25 0h	$p=<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 2h	$p=0.0004$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 4h	$p=0.0765$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 6h	$p=0.9980$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 8h	$p=0.9988$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 10h	$p=0.0014$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL17</i>		
IL-25 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 2h	$p=0.9382$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 4h	$p=0.0015$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 8h	$p=0.0033$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL22</i>		
IL-25 0h	$p=0.9998$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 2h	$p=0.1486$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 4h	$p=0.5403$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 6h	$p=0.1091$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 8h	$p=0.8866$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-25 10h	$p=0.5127$	WT $n=3$, $DDX5^{-/-}$ $n=3$
Extended Data Fig.6e		

<i>CCL20</i>		
IL-4 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL1</i>		
IL-4 0h	$p=0.0013$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 2h	$p=0.0778$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 4h	$p=0.6361$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 6h	$p=0.0794$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 8h	$p=0.0048$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 10h	$p=0.0299$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL2</i>		
IL-4 0h	$p=0.8912$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 2h	$p=0.7548$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 4h	$p=0.7548$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 6h	$p=0.0014$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 10h	$p=0.0187$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CXCL6</i>		
IL-4 0h	$p=0.9992$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 2h	$p=0.5598$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 4h	$p=0.1821$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 6h	$p=0.0035$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 8h	$p=0.4617$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 10h	$p=0.0181$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL3</i>		
IL-4 0h	$p=<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 2h	$p=0.0875$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 4h	$p=0.0744$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 6h	$p=0.0485$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 8h	$p=0.9992$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 10h	$p=0.0015$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL17</i>		
IL-4 0h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 2h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 4h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 6h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 8h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 10h	$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
<i>CCL22</i>		

IL-4 0h		$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 2h		$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 4h		$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 6h		$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 8h		$p<0.0001$	WT $n=3$, $DDX5^{-/-}$ $n=3$
IL-4 10h		$p=0.0244$	WT $n=3$, $DDX5^{-/-}$ $n=3$
Extended Data Fig. 6h			
<i>IL36RN</i>	WT vs $DDX5^{-/-}$	$p=0.1555$	$n=3$
<i>IL38</i>	WT vs $DDX5^{-/-}$	$p=0.9181$	$n=3$
Extended Data Fig. 6i			
<i>IL36RN</i>	NC vs siDDX5	$p=0.1910$	$n=3$
<i>IL38</i>	NC vs siDDX5	$p=0.4461$	$n=3$
Extended Data Fig. 7j			
<i>DDX1</i>	NC vs siDDX1	$p=0.0991$	$n=3$
<i>DDX3</i>	NC vs siDDX3	$p=0.2332$	$n=3$
<i>DDX5</i>	NC vs siDDX5	$p=0.1648$	$n=3$
<i>DDX17</i>	NC vs siDDX17	$p=0.0013$	$n=3$
<i>DDX23</i>	NC vs siDDX23	$p=0.1056$	$n=3$
<i>DDX39</i>	NC vs siDDX39	$p=0.2526$	$n=3$
<i>DDX41</i>	NC vs siDDX41	$p=0.4116$	$n=3$
<i>DDX42</i>	NC vs siDDX42	$p=0.4508$	$n=3$
<i>DDX46</i>	NC vs siDDX46	$p=0.0048$	$n=3$
<i>DDX48</i>	NC vs siDDX48	$p=0.4021$	$n=3$
Extended Data Fig. 8d			
<i>CCL20</i>	0h:NC vs 0h:siSF2	$p> 0.9999$	$n=3$
	1h:NC vs 1h:siSF2	$p=0.4536$	$n=3$
	3h:NC vs 3h:siSF2	$p<0.0001$	$n=3$
	5h:NC vs 5h:siSF2	$p<0.0001$	$n=3$
	7h:NC vs 7h:siSF2	$p<0.0001$	$n=3$
<i>CXCL1</i>	0h:NC vs 0h:siSF2	$p> 0.9999$	$n=3$
	1h:NC vs 1h:siSF2	$p=0.9485$	$n=3$
	3h:NC vs 3h:siSF2	$p=0.0002$	$n=3$
	5h:NC vs 5h:siSF2	$p<0.0001$	$n=3$
	7h:NC vs 7h:siSF2	$p=0.2714$	$n=3$
<i>CXCL6</i>	0h:NC vs 0h:siSF2	$p> 0.9999$	$n=3$
	1h:NC vs 1h:siSF2	$p> 0.9999$	$n=3$
	3h:NC vs 3h:siSF2	$p=0.0662$	$n=3$
	5h:NC vs 5h:siSF2	$p<0.0001$	$n=3$
	7h:NC vs 7h:siSF2	$p<0.0001$	$n=3$
<i>CCL17</i>	0h:NC vs 0h:siSF2	$p=0.8831$	$n=3$
	1h:NC vs 1h:siSF2	$p<0.0001$	$n=3$
	3h:NC vs 3h:siSF2	$p=0.0011$	$n=3$
	5h:NC vs 5h:siSF2	$p<0.0001$	$n=3$

	7h:NC vs 7h:siSF2	$p=0.0002$	$n=3$
<i>CCL3</i>	0h:NC vs 0h:siSF2	$p=0.1007$	$n=3$
	1h:NC vs 1h:siSF2	$p<0.0001$	$n=3$
	3h:NC vs 3h:siSF2	$p<0.0001$	$n=3$
	5h:NC vs 5h:siSF2	$p<0.0001$	$n=3$
	7h:NC vs 7h:siSF2	$p<0.0001$	$n=3$
<i>CCL11</i>	0h:NC vs 0h:siSF2	$p=0.9995$	$n=3$
	1h:NC vs 1h:siSF2	$p=0.9750$	$n=3$
	3h:NC vs 3h:siSF2	$p=0.0002$	$n=3$
	5h:NC vs 5h:siSF2	$p=0.0212$	$n=3$
	7h:NC vs 7h:siSF2	$p>0.9999$	$n=3$
<i>CCL27</i>	0h:NC vs 0h:siSF2	$p=0.9998$	$n=3$
	1h:NC vs 1h:siSF2	$p=0.3194$	$n=3$
	3h:NC vs 3h:siSF2	$p=0.1597$	$n=3$
	5h:NC vs 5h:siSF2	$p=0.0631$	$n=3$
	7h:NC vs 7h:siSF2	$p=0.0483$	$n=3$
Extended Data Fig. 9a			
PBS vs siL-36R		$p=0.0004$	PBS $n=6$, siL-36R $n=6$
Extended Data Fig. 9b			
<i>CCL20</i>			
pcmv:NC vs pcmv:siDDX5		$p=0.0796$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs siL36R:NC		$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs siL36R:siDDX5		$p=0.0071$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs siL36R+IL36 γ :NC		$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv+IL36 γ :siDDX5		$p=0.9397$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs siL36R+ IL36 γ :NC		$p=0.0023$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs siL36R + IL36 γ :siDDX5		$p=0.0475$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs siL36R:NC		$p=0.8916$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs siL36R:siDDX5		$p=0.9001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+ IL36 γ :NC		$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+ IL36 γ :siDDX5		$p=0.4666$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs siL-36R+ IL36 γ :NC		$p=0.6027$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs IL36 γ :siDDX5		$p=0.3982$	NC $n=3$, siDDX5 $n=3$
siL36R:NC vs siL36R:siDDX5		$p=0.0041$	NC $n=3$, siDDX5 $n=3$
siL36R:NC vs pcmv+IL36 γ :NC		$p<0.0001$	NC $n=3$, siDDX5 $n=3$
siL36R:NC vs pcmv+ IL36 γ :siDDX5		$p=0.8393$	NC $n=3$, siDDX5 $n=3$
siL36R:NC vs siL36R+IL36 γ :NC		$p=0.0013$	NC $n=3$, siDDX5 $n=3$
siL36R:NC vs siL36R + IL36 γ :siDDX5		$p=0.2441$	NC $n=3$, siDDX5 $n=3$
siL36R:siDDX5 vs pcmv+IL36 γ :NC		$p<0.0001$	NC $n=3$, siDDX5 $n=3$
siL36R:siDDX5 vs pcmv+ IL36 γ :siDDX5		$p=0.9912$	NC $n=3$, siDDX5 $n=3$

sIL36R:siDDX5 vs sIL36R+IL36g:NC	$p=0.0921$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs pcmv+IL36γ:siDDX5	$p=<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+ IL36γ:NC vs sIL36R +IL36γ:NC	$p=0.0628$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs sIL36R+IL36γ:siDDX5	$p=0.9987$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:siDDX5 vs sIL36R+IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:siDDX5 vs sIL36R+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R+IL36γ:NC vs sIL36R+IL36γ:siDDX5	$p=0.0208$	NC $n=3$, siDDX5 $n=3$
<i>CXCL1</i>		
pcmv:NC vs pcmv:siDDX5	$p <0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:NC	$p <0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:siDDX5	$p >0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p=0.0020$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv+IL36γ:siDDX5	$p=0.2535$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R +IL36γ:siDDX5	$p=0.6037$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL36γ:NC	$p=0.3056$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL-36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL-36R+IL36γ:NC	$p=0.0007$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs IL-36γ:siDDX5	$p=0.3090$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R:siDDX5	$p=0.0022$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36γ:NC	$p=0.2759$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R+IL36γ:NC	$p=0.6372$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R +IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36γ:NC	$p=0.2229$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+ IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:NC	$p=0.0692$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:siDDX5	$p=0.0039$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$

pcmv+ IL36 γ :NC vs sIL36R + IL36 γ :NC	$p=0.9964$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :NC vs sIL36R+ IL36 γ :siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :siDDX5 vs sIL36R+IL36 γ :NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :siDDX5 vs sIL36R+ IL36 γ :siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R+IL36 γ :NC vs sIL36R+ IL36 γ :siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
<i>CXCL2</i>		
pcmv:NC vs pcmv:siDDX5	$p= 0.6941$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:NC	$p=>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:siDDX5	$p=0.9832$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36 γ :NC	$p=0.0068$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv+IL36 γ :siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36 γ :NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R +IL36 γ :siDDX5	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:NC	$p=0.9771$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5vs sIL36R:siDDX5	$p=0.8415$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL36 γ :NC	$p=0.9905$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL-36 γ :siDDX5	$p=0.1604$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL-36R+IL36 γ :NC	$p=0.0002$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs IL-36 γ :siDDX5	$p=0.8120$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R:siDDX5	$p=0.9936$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36 γ :NC	$p= 0.0118$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36 γ :siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R+IL36 γ :NC	$p=>0.9999$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R +IL36 γ :siDDX5	$p=0.9971$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36 γ :NC	$p=0.0378$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36 γ :siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36 γ :NC	$p=0.9968$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36 γ :siDDX5	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :NC vs pcmv+IL36 γ :siDDX5	$p=0.0413$	NC $n=3$, siDDX5 $n=3$
pcmv+ IL36 γ :NC vs sIL36R + IL36 γ :NC	$p=0.0104$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :NC vs sIL36R+ IL36 γ :siDDX5	$p=0.0417$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :siDDX5 vs	$p<0.0001$	NC $n=3$, siDDX5 $n=3$

sIL36R+IL36γ:NC		
pcmv+IL36γ:siDDX5 vs sIL36R+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R+IL36γ:NC vs sIL36R+IL36γ:siDDX5	$p=0.9950$	NC $n=3$, siDDX5 $n=3$
<i>CXCL3</i>		NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv:siDDX5	$p=0.4013$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:NC	$p=>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:siDDX5	$p=0.9192$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R +IL36γ:siDDX5	$p=0.7218$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:NC	$p=0.4752$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:siDDX5	$p=0.9689$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL36γ:NC	$p=0.0003$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL-36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL-36R+IL36γ:NC	$p=0.6190$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs IL-36γ:siDDX5	$p=0.9990$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R:siDDX5	$p=0.9548$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R+IL36γ:NC	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R +IL36γ:siDDX5	$p=0.7948$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36γ:siDDX5	$p=<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:NC	$p=0.9890$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:siDDX5	$p=0.9998$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs pcmv+IL36γ:siDDX5	$p=0.7905$	NC $n=3$, siDDX5 $n=3$
pcmv+ IL36γ:NC vs sIL36R +IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs sIL36R+IL36γ:siDDX5	$p=0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36g:siDDX5 vs sIL36R+IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36g:siDDX5 vs sIL36R+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R+IL36γ:NC vs sIL36R+IL36γ:siDDX5	$p=0.9013$	NC $n=3$, siDDX5 $n=3$

<i>CCL3</i>		
pcmv:NC vs pcmv:siDDX5	$p=0.5376$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:NC	$p=0.9605$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:siDDX5	$p=0.7233$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36 γ :NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv+IL36 γ :siDDX5	$p=0.0002$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36 γ :NC	$p=0.2209$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R +IL36 γ :siDDX5	$p=0.9802$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:NC	$p=0.0163$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:siDDX5	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL36 γ :NC	$p=0.0068$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL-36 γ :siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL-36R+IL36 γ :NC	$p=0.9971$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs IL-36 γ :siDDX5	$p=0.4576$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R:siDDX5	$p=0.9984$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36 γ :NC	$p=0.0012$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36 γ :siDDX5	$p=0.9719$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R+IL36 γ :NC	$p= <0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R +IL36 γ :siDDX5	$p=0.7596$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36 γ :NC	$p=0.1142$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36 γ :siDDX5	$p=0.0037$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36 γ :NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36 γ :siDDX5	$p=0.2997$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :NC vs pcmv+IL36 γ :siDDX5	$p=0.2322$	NC $n=3$, siDDX5 $n=3$
pcmv+ IL36 γ :NC vs sIL36R + IL36 γ :NC	$p=0.0244$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :NC vs sIL36R+ IL36 γ :siDDX5	$p=0.3030$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :siDDX5 vs sIL36R+IL36 γ :NC	$p=0.0002$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :siDDX5 vs sIL36R+ IL36 γ :siDDX5	$p=0.0026$	NC $n=3$, siDDX5 $n=3$
sIL36R+IL36 γ :NC vs sIL36R+ IL36 γ :siDDX5	$p=0.8283$	NC $n=3$, siDDX5 $n=3$
<i>CCL11</i>		NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv:siDDX5	$p= 0.0073$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:NC	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:siDDX5	$p=0.0838$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36 γ :NC	$p=0.0002$	NC $n=3$, siDDX5 $n=3$

pcmv:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p=0.0094$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R +IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:NC	$p=0.0061$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:siDDX5	$p=0.8944$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL36γ:NC	$p=0.6356$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL-36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL-36R+IL36γ:NC	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs IL-36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R:siDDX5	$p=0.0708$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36γ:NC	$p=0.0002$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R+IL36γ:NC	$p=0.0079$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R +IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36γ:NC	$p=0.1030$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:NC	$p=0.9360$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+ IL36γ:NC vs sIL36R + IL36γ:NC	$p=0.5576$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs sIL36R+ IL36γ:siDDX5	$p=0.0004$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:siDDX5 vs sIL36R+IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:siDDX5 vs sIL36R+ IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R+IL36γ:NC vs sIL36R+ IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
<i>CCL17</i>		
pcmv:NC vs pcmv:siDDX5	$p=0.1056$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:NC	$p=0.9989$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:siDDX5	$p=0.8081$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p=0.0023$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p=0.1205$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R +IL36γ:siDDX5	$p=0.3929$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:NC	$p=0.0374$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:siDDX5	$p=0.7582$	NC $n=3$, siDDX5 $n=3$

pcmv:siDDX5 vs pcmv+IL36γ:NC	$p=0.5038$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL-36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL-36R+IL36γ:NC	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs IL-36γ:siDDX5	$p=0.9878$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R:siDDX5	$p=0.4863$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36γ:NC	$p=0.0008$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R+IL36γ:NC	$p=0.0431$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R +IL36γ:siDDX5	$p=0.1686$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36γ:NC	$p=0.0396$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:NC	$p=0.7976$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36γ:siDDX5	$p=0.9943$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs pcmv+IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+ IL36γ:NC vs sIL36R + IL36γ:NC	$p=0.4611$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:NC vs sIL36R+ IL36γ:siDDX5	$p=0.1498$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:siDDX5 vs sIL36R+IL36γ:NC	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36γ:siDDX5 vs sIL36R+ IL36γ:siDDX5	$p<0.0001$	NC $n=3$, siDDX5 $n=3$
sIL36R+IL36γ:NC vs sIL36R+ IL36γ:siDDX5	$p=0.9930$	NC $n=3$, siDDX5 $n=3$
<i>CCL27</i>		NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv:siDDX5	$p=0.9626$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:NC	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R:siDDX5	$p=0.9841$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p=0.6596$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs pcmv+IL36γ:siDDX5	$p=0.0064$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R+IL36γ:NC	$p=0.9208$	NC $n=3$, siDDX5 $n=3$
pcmv:NC vs sIL36R +IL36γ:siDDX5	$p=0.0049$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:NC	$p=0.9720$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL36R:siDDX5	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL36γ:NC	$p=0.9950$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs pcmv+IL-36γ:siDDX5	$p=0.0468$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs sIL-36R+IL36γ:NC	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
pcmv:siDDX5 vs IL-36γ:siDDX5	$p=0.0363$	NC $n=3$, siDDX5 $n=3$

sIL36R:NC vs sIL36R:siDDX5	$p=0.9890$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36 γ :NC	$p=0.6916$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs pcmv+IL36 γ :siDDX5	$p=0.0071$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R+IL36 γ :NC	$p=0.9366$	NC $n=3$, siDDX5 $n=3$
sIL36R:NC vs sIL36R +IL36 γ :siDDX5	$p=0.0055$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36 γ :NC	$p=0.9849$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs pcmv+IL36 γ :siDDX5	$p=0.0352$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs sIL36R+IL36 γ :NC	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
sIL36R:siDDX5 vs IL36R+IL36 γ :siDDX5	$p=0.0272$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :NC vs pcmv+IL36 γ :siDDX5	$p=0.1687$	NC $n=3$, siDDX5 $n=3$
pcmv+ IL36 γ :NC vs sIL36R +IL36 γ :NC	$p=0.9991$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :NC vs sIL36R+IL36 γ :siDDX5	$p=0.1345$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :siDDX5 vs sIL36R+IL36 γ :NC	$p=0.0642$	NC $n=3$, siDDX5 $n=3$
pcmv+IL36 γ :siDDX5 vs sIL36R+IL36 γ :siDDX5	$p>0.9999$	NC $n=3$, siDDX5 $n=3$
sIL36R+IL36 γ :NC vs sIL36R+IL36 γ :siDDX5	$p=0.0500$	NC $n=3$, siDDX5 $n=3$
Extended Data Fig. 9d		
<i>Ccl20</i>	$p=0.0060$	PBS $n=5$, sIL-36R $n=5$
<i>Cxcl1</i>	$p=0.0032$	PBS $n=5$, sIL-36R $n=5$
<i>Il23</i>	$p=0.0022$	PBS $n=5$, sIL-36R $n=5$
<i>Il17a</i>	$p=0.0002$	PBS $n=5$, sIL-36R $n=5$
Extended Data Fig. 9e		
PBS vs sIL-36R	$p=0.0043$	PBS $n=6$, sIL-36R $n=6$
Extended Data Fig. 9f		
CD45 ⁺ cells in skin (%)	$p=0.0010$	PBS $n=6$, sIL-36R $n=6$
Neutrophils in skin (%)	$p=0.0158$	PBS $n=6$, sIL-36R $n=6$
MHCII ⁺ antigen-presenting cell in skin (%)	$p=0.0178$	PBS $n=6$, sIL-36R $n=6$
CD3 ⁺ γ δ T ⁺ cells in skin (%)	$p=0.0122$	PBS $n=6$, sIL-36R $n=6$