

458 **Supplementary Tables**

	Atopic Dermatitis		Non-lesional Pso		
Gene	Fold change	P-Value	Fold change	P-Value	Gene Description
APOBEC3A	0.18	1.20E-02	1.07	7.33E-02	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3A
APOBEC3B	0.62	5.04E-01	1.17	8.24E-02	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3B
APOBEC3C	0.96	9.38E-01	1.05	2.06E-01	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3C
APOBEC3D	NA	NA	1.03	2.91E-01	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3D
APOBEC3F	1.09	9.45E-01	1.06	6.17E-02	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3F
APOBEC3G	0.44	3.01E-01	0.99	8.84E-01	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3G
APOBEC3H	NA	NA	NA	NA	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3H
BRD4	1.31	1.22E-01	1.05	8.15E-02	bromodomain containing 4
BST2	0.67	7.42E-01	1.02	6.79E-01	bone marrow stromal cell antigen 2
CD74	0.68	2.68E-01	0.76	5.12E-03	CD74 molecule, major histocompatibility complex, class II invariant
CDKN1A	0.74	2.16E-01	1.00	9.76E-01	cyclin-dependent kinase inhibitor 1A (p21, Cip1)
CH25H	0.39	1.67E-02	0.93	2.86E-01	cholesterol 25-hydroxylase
CNP	1.00	9.89E-01	0.98	6.41E-01	2',3'-cyclic nucleotide 3' phosphodiesterase
CTR9	0.80	2.99E-01	1.00	9.92E-01	Ctr9, Paf1/RNA polymerase II complex component, homolog
EIF2AK2	0.84	5.05E-01	0.92	3.02E-02	eukaryotic translation initiation factor 2-alpha kinase 2
HERC5	0.78	4.91E-01	0.88	1.13E-02	HECT and RLD domain containing E3 ubiquitin protein ligase 5
IFITM1	0.61	2.12E-02	0.98	6.68E-01	interferon induced transmembrane protein 1
IFITM2	0.68	2.43E-01	0.98	6.25E-01	interferon induced transmembrane protein 2
IFITM3	0.58	7.47E-02	0.96	3.21E-01	interferon induced transmembrane protein 3
IRF1	0.87	6.29E-01	0.95	5.35E-01	interferon regulatory factor 1
IRF7	0.43	5.93E-03	1.10	7.70E-02	interferon regulatory factor 7
ISG15	0.42	1.74E-02	1.00	9.66E-01	ISG15 ubiquitin-like modifier
LGALS3BP	0.51	1.37E-02	0.95	4.46E-01	lectin, galactoside-binding, soluble, 3 binding protein
MOV10	NA	NA	0.98	6.95E-01	Mov10, Moloney leukemia virus 10, homolog (mouse)
MX2	0.62	7.23E-02	0.89	6.49E-02	myxovirus (influenza virus) resistance 2 (mouse)
PAF1	0.79	5.39E-01	0.99	8.90E-01	Paf1, RNA polymerase II associated factor, homolog (S. cerevisiae)
PML	0.55	2.16E-01	0.94	1.14E-01	promyelocytic leukemia
RNASEL	0.68	5.25E-01	0.98	6.23E-01	ribonuclease L (2',5'-oligoisoadenylate synthetase-dependent)
RSAD2	0.94	9.61E-01	0.94	4.11E-01	radical S-adenosyl methionine domain containing 2
RTF1	1.17	3.38E-01	1.02	6.16E-01	Rtf1, Paf1/RNA polymerase II complex component, homolog
SAMHD1	0.46	2.09E-01	1.02	6.90E-01	SAM domain and HD domain 1
SLFN11	NA	NA	0.83	9.25E-03	schlafen family member 11
SUN2	1.15	5.21E-01	1.05	6.11E-02	Sad1 and UNC84 domain containing 2
TNFRSF10A	NA	NA	1.08	1.17E-01	tumor necrosis factor receptor superfamily, member 10a
TRIM11	NA	NA	0.95	1.46E-01	tripartite motif containing 11
TRIM14	0.61	9.05E-02	1.04	5.58E-01	tripartite motif containing 14
TRIM21	0.91	7.58E-01	0.92	1.46E-02	tripartite motif containing 21

TRIM22	0.71	1.78E-01	0.98	7.53E-01	tripartite motif containing 22
TRIM26	0.90	7.25E-01	1.02	5.98E-01	tripartite motif containing 26
TRIM28	0.79	2.75E-01	0.92	7.62E-02	tripartite motif containing 28
TRIM32	0.87	4.31E-01	0.91	7.84E-02	tripartite motif containing 32
TRIM5	1.02	9.84E-01	0.98	7.55E-01	tripartite motif containing 5

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460 **Supplementary Table 1. Antiviral restriction factor expression in atopic dermatitis**461 **and non-lesional psoriasis skin.** The expression levels of antiviral restriction factors

462 were measured in atopic dermatitis vs healthy skin (Affymetrix HG-U133A microarray)

463 and non-lesional psoriasis skin vs healthy skin (Affymetrix HU133 Plus 2.0 Microarray).

464 In instances in which more than one microarray probe is present per gene, data from

465 median p-value probe is displayed.

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	Quantitative Real-Time PCR	
Gene	Fold change	P-value
APOBEC3A	0.79	1.64E-01
APOBEC3B	0.84	8.16E-01
APOBEC3C	0.99	9.17E-01
APOBEC3D	1.00	9.04E-01
APOBEC3F	0.82	9.68E-01
APOBEC3G	1.03	8.79E-01
APOBEC3H	1.10	9.55E-01
BRD4	1.01	6.18E-01
BST2	1.01	3.47E-01
CD74	1.04	9.42E-01
CDKN1A	1.08	5.90E-01
CH25H	1.11	7.28E-01
CNP	1.05	3.07E-01
CTR9	1.09	3.31E-01
EIF2AK2	0.86	5.05E-01
HERC5	0.83	7.91E-01
IFITM1	0.86	1.64E-01
IFITM2	0.97	9.55E-01
IFITM3	0.86	5.47E-01
IRF1	0.95	5.47E-01
IRF7	0.80	2.81E-01
ISG15	1.05	4.17E-01
LGALS3BP	0.71	2.31E-01
MOV10	0.86	1.55E-01
MX2	0.86	4.45E-01
PAF1	1.05	5.36E-01
PML	0.93	9.87E-01
RNASEL	0.98	9.10E-01
RSAD2	0.64	9.55E-01
RTF1	1.08	8.83E-02
SAMHD1	1.09	3.23E-01
SLFN11	1.09	5.41E-01
SUN2	0.89	8.24E-02
TNFRSF10A	0.99	8.91E-01
TRIM11	0.94	5.47E-01
TRIM14	0.94	7.54E-01
TRIM21	0.98	6.35E-01

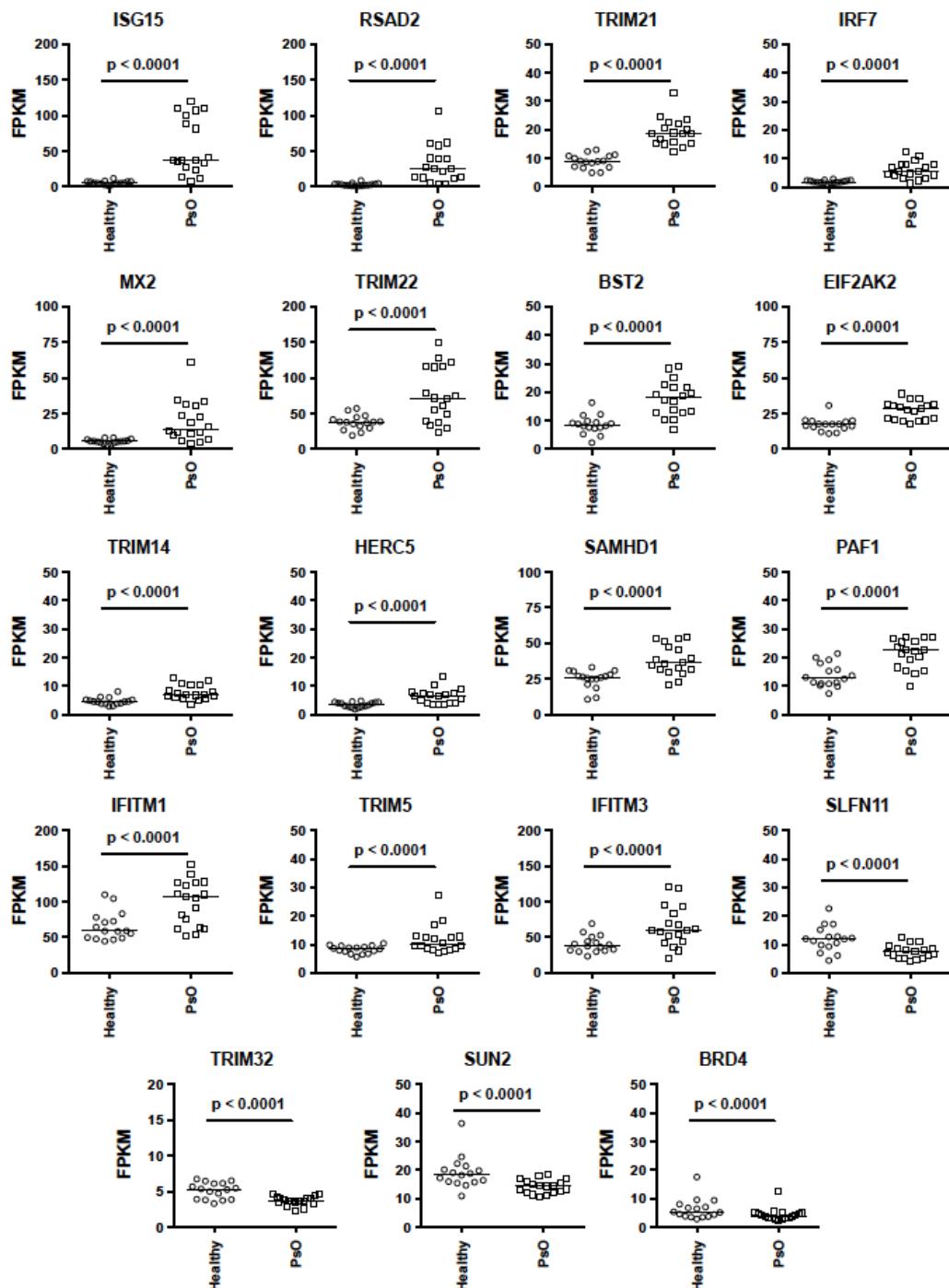
TRIM22	0.88	6.13E-01
TRIM26	0.99	6.35E-01
TRIM28	1.00	9.36E-01
TRIM32	0.81	1.17E-01
TRIM5	0.94	9.17E-01

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470 **Supplementary Table 2. Antiviral restriction factor expression in psoriatic versus**
471 **healthy PBMC.** The expression levels of antiviral restriction factors were measured in
472 psoriatic (N=32) and healthy control PBMC (N=25) using quantitative real-time PCR.
473 Fold change refers expression level in PBMC from psoriatic patients relative to healthy
474 control PBMC. Statistical significance was evaluated using Mann-Whitney tests.

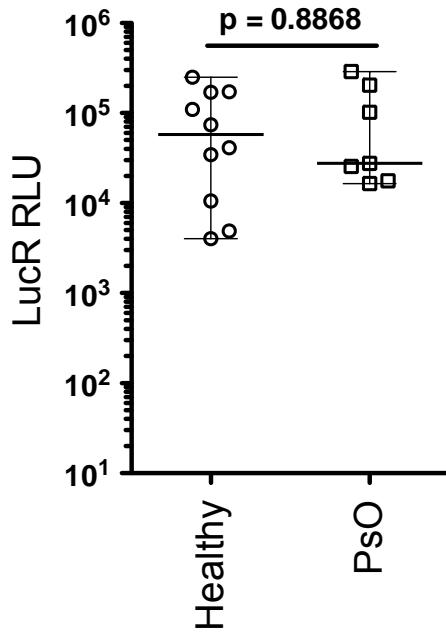
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477 **Supplementary Figures**

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479 **Supplementary Figure 1.** Gene expression of antiviral genes (measured in FPKM,
 480 fragments per kilobase of exon per million fragments mapped) in skin of healthy controls
 481 and lesional skin of subjects with psoriasis.



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483 **Supplementary Figure 2.** *Ex vivo* HIV-1 infectivity in CD4+ T cells from healthy (N=10)
484 and psoriatic (PsO) patients (N=7). Purified CD4+ T cells were infected with HIV-1 Bal
485 with Tat-regulated Renilla luciferase for 7 days. Renilla Luciferase (LucR) activity was
486 measured and relative light units (RLU) is reported as median +/- range. Statistical
487 analysis was evaluated using Mann-Whitney test.

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