

**Additional File 3. List of 42 cytokine experiments (primary monolayer KC cultures, HaCaT KCs or 3-D reconstituted epidermis).** The table lists experiments in which gene expression responses were evaluated in cytokine-treated cells. The label for each experiment indicates the cytokine used, the concentration (per mL), the length of time cells were treated, and the Gene Expression Omnibus accession under which raw data can be accessed. The third column lists the microarray platform used to evaluate gene expression in each experiment and the corresponding Gene Expression Omnibus platform identification number. Further details on each experiment are available from Gene Expression Omnibus or the reference listed in the final column.

Label	Cell Type	Array Platform	Reference
IL1a (25ng 48hr GSE9120)	primary KCs	Affymetrix Human Genome U133A 2.0 Array (GPL571)	Yano et al. 2008 (J Cell Physiol 214:1-13)
IL1a (10ng 24hr GSE25400)	reconstituted epidermis	Affymetrix Human Gene 1.0 ST Array (GPL6244)	Johnston et al. 2011 (J Immunol 186:2613-22)
IL1b (10ng 4d GSE7216)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Sa et al. 2007 (J Immunol 178:2229-40)
IL4 (20ng 24hr GSE36287)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Swindell et al. 2012 (PLoS ONE 7:e34594)
IL13 (20ng 24hr GSE36287)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Swindell et al. 2012 (PLoS ONE 7:e34594)
IL17A (200ng 24hr GSE12109)	primary KCs	Affymetrix Human Genome U133A 2.0 Array (GPL571)	Nograles et al. 2008 (Br J Dermatol 159:1092-102)
IL17A (200ng 24hr GSE24767)	primary KCs	Illumina HumanHT-12 V3.0 expression beadchip (GPL6947)	Chiricozzi et al. 2011 (J Invest Dermatol 131:677-87)
IL17A (20ng 24hr GSE36287)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Swindell et al. 2012 (PLoS ONE 7:e34594)
IL17C (500ng 3hr GSE32620)	primary KCs	Agilent-014850 Whole Human Genome Microarray 4x44K G4112F (GPL6480)	Ramirez-Carrozzi et al. 2011 (Nat Immunol 12:1159-66)
IL17C (500ng 24hr GSE32620)	primary KCs	Agilent-014850 Whole Human Genome Microarray 4x44K G4112F (GPL6480)	Ramirez-Carrozzi et al. 2011 (Nat Immunol 12:1159-66)
IL19 (20ng 4d GSE7216)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Sa et al. 2007 (J Immunol 178:2229-40)
IL20 (20ng 4d GSE7216)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Sa et al. 2007 (J Immunol 178:2229-40)

IL22 (20ng 4d GSE7216)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Sa et al. 2007 (J Immunol 178:2229-40)
IL22 (200ng 24hr GSE12109)	primary KCs	Affymetrix Human Genome U133A 2.0 Array (GPL571)	Nograles et al. 2008 (Br J Dermatol 159:1092-102)
IL24 (20ng 4d GSE7216)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Sa et al. 2007 (J Immunol 178:2229-40)
IL26d (20ng 4d GSE7216)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Sa et al. 2007 (J Immunol 178:2229-40)
IL36RA (5Kng 24hr GSE25400)	reconstituted epidermis	Affymetrix Human Gene 1.0 ST Array (GPL6244)	Johnston et al. 2011 (J Immunol 186:2613-22)
IL36a (5Kng 24hr GSE25400)	reconstituted epidermis	Affymetrix Human Gene 1.0 ST Array (GPL6244)	Johnston et al. 2011 (J Immunol 186:2613-22)
IL36b (5Kng 24hr GSE25400)	reconstituted epidermis	Affymetrix Human Gene 1.0 ST Array (GPL6244)	Johnston et al. 2011 (J Immunol 186:2613-22)
IL36g (5Kng 24hr GSE25400)	reconstituted epidermis	Affymetrix Human Gene 1.0 ST Array (GPL6244)	Johnston et al. 2011 (J Immunol 186:2613-22)
IFNa (20ng 24hr GSE36287)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Swindell et al. 2012 (PLoS ONE 7:e34594)
IFNg (1IU 24hr GSE1132)	primary KCs	Affymetrix Human Genome U133A/U133B Array (GPL96/GPL97)	Mansourian et al. 2004 (Bioinformatics 20:2726-37)
IFNg (48hr GSE440)	primary KCs	Affymetrix Human Genome U95 Version 2 Array (GPL8300)	Banno et al. 2003 (Antivir Ther 8:541-54)
IFNg (10ng 4d GSE7216)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Sa et al. 2007 (J Immunol 178:2229-40)
IFNg (20ng 24hr GSE12109)	primary KCs	Affymetrix Human Genome U133A 2.0 Array (GPL571)	Nograles et al. 2008 (Br J Dermatol 159:1092-102)
IFNg (20ng 24hr GSE36287)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Swindell et al. 2012 (PLoS ONE 7:e34594)
TGF $\alpha$ (20ng 30min GSE8531)	primary KCs	Affymetrix Human Genome U133A 2.0 Array (GPL571)	Cheng et al. 2008 (J Invest Dermatol 128:1981-90)
TGF $\alpha$ (20ng 1hr GSE8531)	primary KCs	Affymetrix Human Genome U133A 2.0 Array (GPL571)	Cheng et al. 2008 (J Invest Dermatol 128:1981-90)

TGF $\alpha$ (20ng 2hr GSE8531)	primary KCs	Affymetrix Human Genome U133A 2.0 Array (GPL571)	Cheng et al. 2008 (J Invest Dermatol 128:1981-90)
TGF $\beta$ (5ng 12hr GSE7661)	HaCatT KCs	UHN-Toronto 19K single spotted Human EST microarray v7 (GPL3515)	N/A
TNF (50ng 1hr GSE2489)	primary KCs	Affymetrix Human Genome U95 Version 2 Array (GPL8300)	Banno et al. 2005 (J Biol Chem 280:18973-80)
TNF (1ng 24hr GSE24767)	primary KCs	Illumina HumanHT-12 V3.0 expression beadchip (GPL6947)	Chiricozzi et al. 2011 (J Invest Dermatol 131:677-87)
TNF (10ng 24hr GSE24767)	primary KCs	Illumina HumanHT-12 V3.0 expression beadchip (GPL6947)	Chiricozzi et al. 2011 (J Invest Dermatol 131:677-87)
TNF (10ng 24hr GSE36287)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Swindell et al. 2012 (PLoS ONE 7:e34594)
TNF (20ng 20hr GSE36387)	primary KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Swindell et al. 2012 (PLoS ONE 7:e34594)
TNF (3d GSE17892)	primary KCs	Homo sapiens 4.8K 02-01 amplified cDNA (GPL1930)	Boccardo et al. 2010 (Carcinogenesis 31:521-31)
TNF (10ng 4hr GSE32975)	HaCaT KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Fertig et al. 2012 (BMC Genomics 13:160)
IL4+IL13 (100ng 2d GSE20706)	primary KCs	Agilent-014850 Whole Human Genome Microarray 4x44K G4112F (GPL6480)	Hirakawa et al. 2011 (J Immunol 186:4762-70)
IL4+IL13 (100ng 2d GSE20706)	primary KCs	Agilent-014850 Whole Human Genome Microarray 4x44K G4112F (GPL6480)	Hirakawa et al. 2011 (J Immunol 186:4762-70)
IL17A+TNF (1ng 24hr GSE24767)	primary KCs	Illumina HumanHT-12 V3.0 expression beadchip (GPL6947)	Chiricozzi et al. 2011 (J Invest Dermatol 131:677-87)
IL17A+TNF (10ng 24hr GSE24767)	primary KCs	Illumina HumanHT-12 V3.0 expression beadchip (GPL6947)	Chiricozzi et al. 2011 (J Invest Dermatol 131:677-87)
TNF+IFNg (24hr GSE20297)	HaCaT KCs	Affymetrix Human Genome U133 Plus 2.0 Array (GPL570)	Fujita et al. 2011 (J Invest Dermatol 131:1660-7)