

Supplemental Materials

Gene Expression Alterations in Immune System Pathways in the Thymus Following Exposure to Immunosuppressive Chemicals

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List Of All Genes On The Custom Immune Function Sentrix Array Matrix

Gene or Transcript ID	RefSeq ID	Name
Abl1	NM_009594	Mus musculus v-abl Abelson murine leukemia oncogene 1 (Abl1), mRNA.
Acox1	NM_015729	Mus musculus acyl-Coenzyme A oxidase 1, palmitoyl (Acox1), mRNA.
Acp5	NM_007388	Mus musculus acid phosphatase 5, tartrate resistant (Acp5), mRNA.
Adprt12	NM_009632	Mus musculus ADP-ribosyltransferase (NAD ⁺ ; poly(ADP-ribose) polymerase)-like 2 (Adprt12), mRNA.
Agpt	NM_009640	Mus musculus angiopoietin (Agpt), mRNA.
Agpt2	NM_013716	Mus musculus angiopoietin 2 (Agpt2), mRNA.
Ahr	NM_013464	Mus musculus aryl-hydrocarbon receptor (Ahr), mRNA.
Ahrr	NM_009644.1	Mus musculus aryl-hydrocarbon receptor repressor (Ahrr)
AI324046	NM_198640	Mus musculus expressed sequence AI324046 (AI324046), mRNA.
Aicda	NM_009645	Mus musculus activation-induced cytidine deaminase (Aicda), mRNA.
Aire	NM_009646	Mus musculus autoimmune regulator (autoimmune polyendocrinopathy candidiasis ectodermal dystrophy) (Aire), mRNA.
Akt1	NM_009652.1	Mus musculus thymoma viral proto-oncogene 1 (Akt1), mRNA.
Aldh1a3	NM_053080	Mus musculus aldehyde dehydrogenase family 1, subfamily A3 (Aldh1a3), mRNA.
Aldh2	NM_009656.1	Mus musculus aldehyde dehydrogenase 2, mitochondrial (Aldh2)
Aldh3a1	NM_007436	Mus musculus aldehyde dehydrogenase family 3, subfamily A1 (Aldh3a1), mRNA.
Ang3	NM_007449	Mus musculus angiogenin, ribonuclease A family, member 3 (Ang3), mRNA.
Apaf1	NM_009684	Mus musculus apoptotic protease activating factor 1 (Apaf1)
Apoe	NM_009696.2	Mus musculus apolipoprotein E (Apoe), mRNA.
Areg	NM_009704	Mus musculus amphiregulin (Areg), mRNA.
Arhgef7	NM_017402.1	Mus musculus Rho guanine nucleotide exchange factor (GEF7)
Arhh	XM_359315	Mus musculus ras homolog gene family, member H (Arhh), mRNA
Arnt	NM_009709.1	Mus musculus aryl hydrocarbon receptor nuclear translocator (Arnt)
Atf2	NM_009715	Mus musculus activating transcription factor 2 (Atf2), mRNA.
Atf3	NM_007498	Mus musculus activating transcription factor 3 (Atf3), mRNA.
AU044919	NM_212451	Mus musculus expressed sequence AU044919 (AU044919), mRNA
AY414638	NM_010125	Mus musculus E74-like factor 5 (Elf5)
B2m	NM_009735	Mus musculus beta-2 microglobulin (B2m), mRNA.
Bad	NM_007522	Mus musculus Bcl-associated death promoter (Bad), mRNA.
Bag1	NM_009736	Mus musculus Bcl2-associated athanogene 1 (Bag1), mRNA.
Baiap1	NM_007464	Mus musculus BAI1-associated protein 1 (Baiap1), mRNA.
Bak1	NM_007523	Mus musculus BCL2-antagonist/killer 1 (Bak1), mRNA.
Bax	NM_007527	Mus musculus Bcl2-associated X protein (Bax), mRNA.
Bbc3	NM_133234.1	Mus musculus Bcl-2 binding component 3 (Bbc3)
Bcap29	NM_007530	Mus musculus B-cell receptor-associated protein 29 (Bcap29), mRNA.

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Gene or Transcript ID	RefSeq ID	Name
Bcap37	NM_007531	Mus musculus B-cell receptor-associated protein 37 (Bcap37), mRNA.
Bcl10	NM_009740	Mus musculus B-cell leukemia/lymphoma 10 (Bcl10), mRNA.
Bcl2	NM_009741	Mus musculus B-cell leukemia/lymphoma 2 (Bcl2), mRNA.
Bcl2a1a	NM_009742	Mus musculus B-cell leukemia/lymphoma 2 related protein A1a (Bcl2a1a), mRNA.
Bcl2a1b	NM_007534	Mus musculus B-cell leukemia/lymphoma 2 related protein A1b (Bcl2a1b), mRNA.
Bcl2l	NM_009743	Mus musculus Bcl2-like (Bcl2l), mRNA.
Bcl2l10	NM_013479	Mus musculus Bcl2-like 10 (Bcl2l10), mRNA.
Bcl2l11v1	NM_207680	Mus musculus BCL2-like 11 (apoptosis facilitator) (Bcl2l11) transcript variant 1, mRNA.
Bcl2l11v2	NM_207681	Mus musculus BCL2-like 11 (apoptosis facilitator) (Bcl2l11), transcript variant 2, mRNA.
Bcl2l11v3	NM_009754	Mus musculus BCL2-like 11 (apoptosis facilitator) (Bcl2l11), mRNA transcript variant 3
Bcl2l2	NM_007537	Mus musculus Bcl2-like 2 (Bcl2l2), mRNA.
Bcl6	NM_009744.2	Mus musculus B-cell leukemia/lymphoma 6 (Bcl6), mRNA.
Bcl6b	NM_007528	Mus musculus B-cell CLL/lymphoma 6, member B (Bcl6b), mRNA.
Bcl7b	NM_009745	Mus musculus B-cell CLL/lymphoma 7B (Bcl7b), mRNA.
Bcl7c	NM_009746	Mus musculus B-cell CLL/lymphoma 7C (Bcl7c), mRNA.
Bid	NM_007544.2	Mus musculus BH3 interacting domain death agonist (Bid), mRNA.
Biklk	NM_007546	Mus musculus Bcl2-interacting killer-like (Biklk), mRNA.
Birc3	XM_125133	Mus musculus similar to Baculoviral IAP repeat-containing protein 3 (Inhibitor of apoptosis protein 2) (MIAP2) (MIAP-2) (Birc3), mRNA.
Blk	NM_007549	Mus musculus B lymphoid kinase (Blk), mRNA.
Blnk	NM_008528	Mus musculus B-cell linker (Blnk), mRNA.
Blr1	NM_007551	Mus musculus Burkitt lymphoma receptor 1 (Blr1), mRNA.
Bmpr2	NM_007561	Mus musculus bone morphogenic protein receptor, type II (serine/threonine kinase) (Bmpr2), mRNA.
Bok	NM_016778	Mus musculus Bcl-2-related ovarian killer protein (Bok), mRNA
Bst1	NM_009763	Mus musculus bone marrow stromal cell antigen 1 (Bst1)
Btc	NM_007568	Mus musculus betacellulin, epidermal growth factor family member (Btc), mRNA.
Btk	NM_013482	Mus musculus Bruton agammaglobulinemia tyrosine kinase (Btk), mRNA.
Btn1a1	NM_013483	Mus musculus butyrophilin, subfamily 1, member A1 (Btn1a1), mRNA.
C1qa	NM_007572	Mus musculus complement component 1, q subcomponent, alpha polypeptide (C1qa), mRNA.
C1qr1	NM_010740	Mus musculus complement component 1, q subcomponent, receptor 1 (C1qr1), mRNA.
C2ta	NM_007575	Mus musculus class II transactivator (C2ta), mRNA.
C3	NM_009778	Mus musculus complement component 3 (C3), mRNA.
C4	NM_009780	Mus musculus complement component 4 (within H-2S) (C4), mRNA.
Capn2	NM_009794	Mus musculus calpain 2 (Capn2), mRNA.
Car2	NM_009801	Mus musculus carbonic anhydrase 2 (Car2), mRNA.
Card15	NM_145857.1	Mus musculus caspase recruitment domain family, member 15 (Card15)
Casp1	NM_009807.1	Mus musculus caspase 1 (Casp1), mRNA.

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Gene or Transcript ID	RefSeq ID	Name
Casp14	NM_009809	Mus musculus caspase 14 (Casp14), mRNA.
Casp2	NM_007610	Mus musculus caspase 2 (Casp2), mRNA.
Casp3	NM_007393	Mus musculus caspase 3, apoptosis related cysteine protease (Casp3), mRNA.
Casp3	NM_009810	Mus musculus caspase 3, apoptosis related cysteine protease (Casp3), mRNA.
Casp4	NM_007609	Mus musculus caspase 4, apoptosis-related cysteine protease (Casp4), mRNA.
Casp6	NM_009811	Mus musculus caspase 6 (Casp6), mRNA.
Casp7	NM_007611.1	Mus musculus caspase 7 (Casp7), mRNA.
Casp8	XM_129752.1	Mus musculus caspase 8 (Casp8)
Casp8ap2	NM_011997	Mus musculus caspase 8 associated protein 2 (Casp8ap2), mRNA.
Casp9	NM_015733	Mus musculus caspase 9 (Casp9), mRNA.
Ccl1	NM_011329	Mus musculus chemokine (C-C motif) ligand 1 (Ccl1), mRNA.
Ccl11	NM_011330	Mus musculus small chemokine (C-C motif) ligand 11 (Ccl11), mRNA.
Ccl12	NM_011331	Mus musculus chemokine (C-C motif) ligand 12 (Ccl12), mRNA.
Ccl17	NM_011332	Mus musculus chemokine (C-C motif) ligand 17 (Ccl17), mRNA.
Ccl19	NM_011888	Mus musculus chemokine (C-C motif) ligand 19 (Ccl19), mRNA.
Ccl2	NM_011333	Mus musculus chemokine (C-C motif) ligand 2 (Ccl2), mRNA.
Ccl21a	NM_011335	Mus musculus chemokine (C-C motif) ligand 21a (leucine) (Ccl21a), mRNA.
Ccl22	NM_009137	Mus musculus chemokine (C-C motif) ligand 22 (Ccl22), mRNA.
Ccl24	NM_019577	Mus musculus chemokine (C-C motif) ligand 24 (Ccl24), mRNA.
Ccl25	NM_009138	Mus musculus chemokine (C-C motif) ligand 25 (Ccl25), mRNA.
Ccl3	NM_011337	Mus musculus chemokine (C-C motif) ligand 3 (Ccl3), mRNA.
Ccl4	NM_013652	Mus musculus chemokine (C-C motif) ligand 4 (Ccl4), mRNA.
Ccl5	NM_013653	Mus musculus chemokine (C-C motif) ligand 5 (Ccl5), mRNA.
Ccl6	NM_009139	Mus musculus chemokine (C-C motif) ligand 6 (Ccl6), mRNA.
Ccl7	NM_013654	Mus musculus chemokine (C-C motif) ligand 7 (Ccl7), mRNA.
Ccl8	NM_021443	Mus musculus chemokine (C-C motif) ligand 8 (Ccl8), mRNA.
Ccl9	NM_011338	Mus musculus chemokine (C-C motif) ligand 9 (Ccl9), mRNA.
Ccna2	NM_009828.1	Mus musculus cyclin A2 (Ccna2)
Ccnd1	NM_007631.1	Mus musculus cyclin D1 (Ccnd1), mRNA.
Ccnd2	NM_009829	Mus musculus cyclin D2 (Ccnd2), mRNA.
Ccnd3	NM_007632	Mus musculus cyclin D3 (Ccnd3), mRNA.
Ccne1	NM_007633	Mus musculus cyclin E1 (Ccne1), mRNA.
Ccnh	NM_023243.2	Mus musculus cyclin H (Ccnh)
Ccni	NM_017367	Mus musculus cyclin I (Ccni), mRNA.
Ccr1	NM_009912.2	Mus musculus chemokine (C-C motif) receptor 1 (Ccr1)
Ccr2	NM_009915	Mus musculus chemokine (C-C) receptor 2 (Ccr2), mRNA.
Ccr3	NM_009914.2	Mus musculus chemokine (C-C) receptor 3 (Ccr3)

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Gene or Transcript ID	RefSeq ID	Name
Ccr4	NM_009916	Mus musculus chemokine (C-C motif) receptor 4 (Ccr4), mRNA.
Ccr5	NM_009917	Mus musculus chemokine (C-C motif) receptor 5 (Ccr5), mRNA.
Ccr6	NM_009835	Mus musculus chemokine (C-C motif) receptor 6 (Ccr6), mRNA.
Ccr7	NM_007719	Mus musculus chemokine (C-C motif) receptor 7 (Ccr7), mRNA.
Ccr7	NM_015811	Mus musculus chemokine (C-C motif) receptor 7 (Ccr7), mRNA.
Ccr8	NM_007720	Mus musculus chemokine (C-C motif) receptor 8 (Ccr8), mRNA.
Ccr9	NM_009913.2	Mus musculus chemokine (C-C motif) receptor 9 (Ccr9)
Ccr12	NM_017466	Mus musculus chemokine (C-C motif) receptor-like 2 (Ccr12), mRNA.
Cct8	NM_009840	Mus musculus chaperonin subunit 8 (theta) (Cct8), mRNA.
Cd14	NM_009841	Mus musculus CD14 antigen (Cd14), mRNA.
Cd151	NM_009842	Mus musculus CD151 antigen (Cd151), mRNA.
Cd19	NM_009844	Mus musculus CD19 antigen (Cd19), mRNA.
Cd1d1	NM_007639	Mus musculus CD1d1 antigen (Cd1d1), mRNA.
Cd22	NM_009845	Mus musculus CD22 antigen (Cd22), mRNA.
Cd244	NM_018729	Mus musculus CD244 natural killer cell receptor 2B4 (Cd244), mRNA
Cd24a	NM_009846	Mus musculus CD24a antigen (Cd24a), mRNA.
Cd28	NM_007642	Mus musculus CD28 antigen (Cd28), mRNA.
Cd36	NM_007643	Mus musculus CD36 antigen (Cd36), mRNA.
Cd38	NM_007646	Mus musculus CD38 antigen (Cd38), mRNA.
Cd3d	NM_013487	Mus musculus CD3 antigen, delta polypeptide (Cd3d), mRNA.
Cd3e	NM_007648	Mus musculus CD3 antigen, epsilon polypeptide (Cd3e), mRNA.
Cd3g	NM_009850	Mus musculus CD3 antigen, gamma polypeptide (Cd3g), mRNA.
Cd3z	NM_031162	Mus musculus CD3 antigen, zeta polypeptide (Cd3z), mRNA.
Cd4	NM_009812	Mus musculus CD4 antigen (Cd4), mRNA.
Cd4	NM_013488	Mus musculus CD4 antigen (Cd4), mRNA.
Cd44	NM_009851	Mus musculus CD44 antigen (Cd44), mRNA.
Cd48	NM_007649.2	Mus musculus CD48 antigen (Cd48), mRNA.
Cd5	NM_007650	Mus musculus CD5 antigen (Cd5), mRNA.
Cd52	NM_013706	Mus musculus CD52 antigen (Cd52), mRNA.
cd53	NM_007651	Mus musculus CD53 antigen (Cd53), mRNA.
Cd6	NM_009852	Mus musculus CD6 antigen (Cd6), mRNA.
Cd68	NM_009853.1	Mus musculus CD68 antigen (Cd68), mRNA.
Cd69	XM_132882	Mus musculus CD69 antigen (Cd69), mRNA.
Cd7	NM_009854	Mus musculus CD7 antigen (Cd7), mRNA.
Cd72	NM_007654	Mus musculus CD72 antigen (Cd72), mRNA.
Cd79b	NM_008339	Mus musculus CD79B antigen (Cd79b), mRNA.
Cd80	NM_009855	Mus musculus CD80 antigen (Cd80), mRNA.

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Gene or Transcript ID	RefSeq ID	Name
Cd81	NM_133655	Mus musculus CD 81 antigen (Cd81), mRNA.
Cd83	NM_009856	Mus musculus CD83 antigen (Cd83), mRNA.
Cd83	NM_013486	Mus musculus CD83 antigen (Cd83), mRNA.
Cd8a	XM_132621	Mus musculus CD8 antigen, alpha chain (Cd8a), mRNA.
Cd8b	NM_009858	Mus musculus CD8 antigen, beta chain (Cd8b), mRNA.
Cd8b	NM_013929	Mus musculus CD8 antigen, beta chain (Cd8b), mRNA.
Cdc25a	NM_007658.1	Mus musculus cell division cycle 25 homolog A (<i>S. cerevisiae</i>) (Cdc25a), mRNA.
Cdk2	NM_016756	Mus musculus cyclin-dependent kinase 2 (Cdk2), mRNA.
Cdk4	NM_009870.2	Mus musculus cyclin-dependent kinase 4 (Cdk4)
Cdk5r	NM_009871	Mus musculus cyclin-dependent kinase 5, regulatory subunit (p35) (Cdk5r), mRNA.
Cdk7	XM_203622.2	Mus musculus cyclin-dependent kinase 7 (homolog of <i>Xenopus</i> MO15 cdk-activating kinase) (Cdk7)
Cdkn1a	NM_007669	Mus musculus cyclin-dependent kinase inhibitor 1A (P21) (Cdkn1a), mRNA.
Cdkn1b	NM_009875	Mus musculus cyclin-dependent kinase inhibitor 1B (P27) (Cdkn1b), mRNA.
Cdkn1c	NM_009876	Mus musculus cyclin-dependent kinase inhibitor 1C (P57) (Cdkn1c), mRNA.
Cdkn2a	NM_009871	Mus musculus cyclin-dependent kinase 5, regulatory subunit (p35) (Cdk5r)
Cdkn2d	NM_009878	Mus musculus cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4) (Cdkn2d), mRNA.
Cebpa	NM_007678	Mus musculus CCAAT/enhancer binding protein (C/EBP), alpha (Cebpa),
Cebpb	NM_009883	Mus musculus CCAAT/enhancer binding protein (C/EBP), beta (Cebpb), mRNA.
Cebpb	NM_033601	Mus musculus CCAAT/enhancer binding protein (C/EBP), beta (Cebpb), mRNA.
Cflar	NM_009805	Mus musculus CASP8 and FADD-like apoptosis regulator (Cflar), mRNA.
Cflar	NM_010175	Mus musculus CASP8 and FADD-like apoptosis regulator (Cflar), mRNA.
Chuk	NM_007700	Mus musculus conserved helix-loop-helix ubiquitous kinase (Chuk), mRNA.
Clecsf8	NM_010819	Mus musculus C-type (calcium dependent, carbohydrate recognition domain) lectin, superfamily member 8 (Clecsf8), mRNA.
Clk4	NM_007714	Mus musculus CDC like kinase 4 (Clk4), mRNA.
Cmkor1	NM_007722	Mus musculus chemokine orphan receptor 1 (Cmkor1), mRNA.
Comt	NM_007744	Mus musculus catechol-O-methyltransferase (Comt), mRNA.
Cr2	NM_007758	Mus musculus complement receptor 2 (Cr2), mRNA.
Crabp1	NM_013496.1	Mus musculus cellular retinoic acid binding protein I (Crabp1), mRNA.
Creb1	NM_009952	Mus musculus cAMP responsive element binding protein 1 (Creb1),
Crisp3	NM_009639	Mus musculus cysteine-rich secretory protein 3 (Crisp3), mRNA.
Crisp3	NM_009655	Mus musculus cysteine-rich secretory protein 3 (Crisp3), mRNA
Crp	NM_007768	Mus musculus C-reactive protein, petaxin related (Crp), mRNA
Cryz	NM_009968	Mus musculus crystallin, zeta (Cryz), mRNA.
Csf1	NM_007778	Mus musculus colony stimulating factor 1 (macrophage) (Csf1), mRNA.
Csf1r	NM_007779	Mus musculus colony stimulating factor 1 receptor (Csf1r), mRNA.

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List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score							
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose	TCDD High Dose
Total number of genes altered			2	98	120	145	170	213	8	73
Common to 4 Chemicals (high dose)										
NM_007632.1	Ccnd3	Mus musculus cyclin D3 (Ccnd3), mRNA.		-97	-102	-220	-46	-308		-21
NM_009331.2	Tcf7	Mus musculus transcription factor 7, T-cell specific (Tcf7), mRNA.		-182	-45	-86	-52	-300		-45
NM_016756.1	Cdk2	Mus musculus cyclin-dependent kinase 2 (Cdk2), mRNA.		-49	-56	-81	-65	-214		-34
NM_010278.1	Gfi1	Mus musculus growth factor independent 1 (Gfi1), mRNA.		-104	-56	-100	-56	-184		-21
NM_010689.2	Lat	Mus musculus linker for activation of T cells (Lat), mRNA.		-187	-65		-37	-181		-25
NM_010511.1	IFNGR1	Mus musculus interferon gamma receptor (Ifngr), mRNA.		-40	-78	-55	-25	-28		-20
NM_009794.1	Capn2	Mus musculus calpain 2 (Capn2), mRNA.		21	23	28	33	42		31
NM_008329.1	Ifi16	Mus musculus interferon, gamma-inducible protein 16 (Ifi16), mRNA.		50	45	20	97	43		23
NM_021524.1	Pbef1	Mus musculus pre-B-cell colony-enhancing factor (Pbef), mRNA.		38	48	56	36	43		23
NM_008161.1	Gpx3	Mus musculus glutathione peroxidase 3 (Gpx3), mRNA		30	21	50	43	47		22
NM_011662.2	Tyrobp	Mus musculus TYRO protein tyrosine kinase binding protein (Tyrobp), mRNA.		27	69	48	70	56		54
NM_008452.1	Klf2	Mus musculus Kruppel-like factor 2 (lung) (Klf2), mRNA.		23	63	39	66	67		79
NM_009807.1	Casp1	Mus musculus caspase 1 (Casp1), mRNA.		46	76	44	85	76		92
NM_010185.2	Fcer1g	Mus musculus Fc receptor, IgE, high affinity I, gamma polypeptide (Fcer1g), mRNA.		41	71	52	91	78		89
NM_010188.2	Fcgr3	Mus musculus Fc receptor, IgG, low affinity III (Fcgr3), mRNA.		50	59	35	90	97	22	85
NM_009696.2	Apoe	Mus musculus apolipoprotein E (Apoe), mRNA.		43	140	65	133	102		37
NM_010738.2	Ly6a	Mus musculus lymphocyte antigen 6 complex, locus A (Ly6a), mRNA.		74	143	32	124	110		115
Common to 3 Chemicals (high dose)										
NM_009828.1	Ccna2	Mus musculus cyclin A2 (Ccna2)		-189	-101	-371	-130	-371		
NM_009345.1	Dntt	Mus musculus deoxynucleotidyltransferase, terminal (Dntt), mRNA.		-371	-89	-365	-79	-371		
NM_010693.1	Lck	Mus musculus lymphocyte protein tyrosine kinase (Lck), mRNA.		-305	-56	-259	-66	-371		
NM_009019.1	Rag1	Mus musculus recombination activating gene 1 (Rag1), mRNA.		-284	-119	-247	-141	-371		
NM_009122.1	Satb1	Mus musculus special AT-rich sequence binding protein 1 (Satb1), mRNA.		-287	-81	-203	-115	-371		
NM_009858.1	Cd8b	Mus musculus CD8 antigen, beta chain (Cd8b), mRNA.		-261	-80	-267	-67	-358		

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GenBank #	Symbol	Gene Name	DIFF Score						
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose
NM_007642.2	Cd28	Mus musculus CD28 antigen (Cd28), mRNA.		-174	-44	-78	-37	-350	
NM_009103.2	Rrm1	Mus musculus ribonucleotide reductase M1 (Rrm1), mRNA.		-82	-91	-230	-94	-341	
NM_010247.1	XRCC6	Mus musculus thyroid autoantigen (G22p1), X-ray repair complementing defective repair in Chinese hamster cells 6 (Xrcc6), mRNA.		-299	-134	-349	-83	-329	
NM_009913.2	Ccr9	Mus musculus chemokine (C-C motif) receptor 9 (Ccr9)		-279	-99	-178	-63	-327	
XM_132621.3	Cd8a	Mus musculus CD8 antigen, alpha chain (Cd8a), mRNA.		-175	-62	-253	-81	-284	
NM_009382.2	Thy1	Mus musculus thymus cell antigen 1, theta (Thy1), mRNA.		-273	-89	-358	-41	-278	
NM_009878.2	Cdkn2d	Mus musculus cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4) (Cdkn2d), mRNA.		-156	-46	-155	-89	-275	
NM_011045.1	Pcna	Mus musculus proliferating cell nuclear antigen (Pcna), mRNA.		-148	-75	-261	-64	-274	
NM_007650.2	Cd5	Mus musculus CD5 antigen (Cd5), mRNA.		-131	-16	-63	-34	-272	
NM_008566.1	Mcm5	Mus musculus minichromosome maintenance deficient 5, cell division cycle 46 (<i>S. cerevisiae</i>) (Mcm5), mRNA.		-59	-51	-149	-46	-258	
NM_010901.1	Nfatc3	Mus musculus nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3 (Nfatc3), mRNA.		-74	-91	-147	-85	-252	
XM_290046.2	LOC333897	Mus musculus similar to T-cell receptor beta chain V region C5		-54	-29	-51		-251	
XM_359315.1	Arhh	Mus musculus ras homolog gene family, member H (Arhh), mRNA		-203	-59	-185	-49	-246	
NM_011568.1	THOC4	Mus musculus RNA and export factor binding protein 1 (Refbp1), THO complex 4		-50	-47	-82	-40	-236	
NM_001033126	CD27	Mus musculus tumor necrosis factor receptor superfamily, member 7 (Tnfrsf7), CD antigen 27 (CD27) mRNA.		-206	-57	-117	-25	-226	
NM_009911.2	Cxcr4	Mus musculus chemokine (C-X-C motif) receptor 4 (Cxcr4), mRNA.		-165	-111	-188	-112	-219	
NM_009850.1	Cd3g	Mus musculus CD3 antigen, gamma polypeptide (Cd3g), mRNA.		-89	-42	-109	-29	-187	
NM_007648.1	Cd3e	Mus musculus CD3 antigen, epsilon polypeptide (Cd3e), mRNA.		-148	-33	-60	-24	-186	
NM_008091.2	Gata3	Mus musculus GATA binding protein 3 (Gata3), mRNA.		-97		-61	-33	-181	
NM_013487.1	Cd3d	Mus musculus CD3 antigen, delta polypeptide (Cd3d), mRNA.		-169	-42	-106	-37	-168	
NM_010703.2	Lef1	Mus musculus lymphoid enhancer binding factor 1 (Lef1), mRNA.		-65		-48	-25	-166	
NM_021366.2	Klf13	Mus musculus Kruppel-like factor 13 (Klf13), mRNA.		-118	-35	-58	-46	-163	
NM_011195.1	Ptcra	Mus musculus pre T-cell antigen receptor alpha (Ptcra), mRNA.		-32	-42	-49		-157	
NM_009744.2	Bcl6	Mus musculus B-cell leukemia/lymphoma 6 (Bcl6), mRNA.		-102	-54	-36	-80	-157	
NM_010583.1	Itk	Mus musculus IL2-inducible T-cell kinase (Itk), mRNA.		-75	-28	-62	-38	-151	
NM_010370.1	Gzma	Mus musculus granzyme A (Gzma), mRNA.		-30		-62		-112	
NM_009852.1	Cd6	Mus musculus CD6 antigen (Cd6), mRNA.		-35		-53	-21	-107	

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score						TCDD Low Dose	TCDD High Dose
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose		
NM_013488.1	Cd4	Mus musculus CD4 antigen (Cd4), mRNA.		-53	-34	-67	-30	-102		
NM_008511.2	Lrmp	Mus musculus lymphoid-restricted membrane protein (Lrmp), mRNA.		-103	-49	-168	-37	-100		
NM_019436.1	SIT1	Mus musculus SHP2 interacting transmembrane adaptor (Sit), mRNA.		-27	-32	-46		-98		
NM_009539.2	Zap70	Mus musculus zeta-chain (TCR) associated protein kinase (Zap70), mRNA.		-50	-22	-72		-86		
NM_010551.1	Il16	Mus musculus interleukin 16 (Il16), mRNA.		-95	-39	-90		-86		
NM_007913.2	Egr1	Mus musculus early growth response 1 (Egr1), mRNA.		-45	-40	-60	-32	-83		
NM_021420.2	Stk4	Mus musculus serine/threonine kinase 4 (Stk4), mRNA.		-64		-25		-77		
NM_011210.1	Ptprc	Mus musculus protein tyrosine phosphatase, receptor type, C (Ptprc), mRNA.		-112	-46	-74	-25	-64		
NM_009515.1	Was	Mus musculus Wiskott-Aldrich syndrome homolog (human) (Was), mRNA.		-28		-27		-59		
NM_007783.2	Csk	Mus musculus c-src tyrosine kinase (Csk), mRNA.		-28		-36		-53		
NM_009138.1	Ccl25	Mus musculus chemokine (C-C motif) ligand 25 (Ccl25), mRNA.				-23		-46	22	42
NM_009896.1	Socs1	Mus musculus suppressor of cytokine signaling 1 (Socs1), mRNA.		-30	-21	-50		-40		
NM_013716.1	G3BP1	Mus musculus Ras-GTPase-activating protein SH3-domain binding protein 1 (G3bp1), mRNA		-24	-23	-29		-38		
NM_011489.2	Stat5b	Mus musculus signal transducer and activator of transcription 5B (Stat5b), mRNA.		-21	-35	-50		-38		
NM_010118.1	Egr2	Mus musculus early growth response 2 (Egr2), mRNA.		-27		-23		-37		
NM_007569.1	Btg1	Mus musculus B-cell translocation gene 1, anti-proliferative (Btg1), mRNA		-26		-21		-25		
NM_010742.1	Ly6d	Mus musculus lymphocyte antigen 6 complex, locus D (Ly6d), mRNA.			-30	-67		-22		27
XM_147265.1	Comt	Mus musculus catechol-O-methyltransferase (Comt), mRNA.		31		33	31			24
NM_009829.2	Ccnd2	Mus musculus cyclin D2 (Ccnd2), mRNA.		23			57	21		31
NM_008599.1	Cxcl9	Mus musculus chemokine (C-X-C motif) ligand 9 (Cxcl9), mRNA.		35	29	21	56	25		
NM_007388.1	Acp5	Mus musculus acid phosphatase 5, tartrate resistant (Acp5), mRNA.			40	42		25		31
NM_009760.2	Bnip3	Mus musculus BCL2/adenovirus E1B 19kDa-interacting protein 1, NIP3				50		26		26
NM_011888.2	Ccl19	Mus musculus chemokine (C-C motif) ligand 19 (Ccl19), mRNA.			27	26	34	26		21
NM_017372.2	LYZ	Mus musculus lysozyme (Lyzs), mRNA			26	53		27		29
NM_009371.2	Tgfr2	Mus musculus transforming growth factor, beta receptor II (Tgfr2), transcript variant 1, mRNA.		22	28	31	38	28		
NM_009842.1	Cd151	Mus musculus CD151 antigen (Cd151), mRNA.		26	23	31	28	32		
NM_019932.1	Cxcl4	Mus musculus chemokine (C-X-C motif) ligand 4 (Cxcl4), mRNA.				22		35		28

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score								
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose	TCDD High Dose	
NM_010276.1	Gem	Mus musculus GTP binding protein (gene overexpressed in skeletal muscle) (Gem), mRNA.		25				27	35		28
NM_010189.1	Fcgrt	Mus musculus Fc receptor, IgG, alpha chain transporter (Fcgrt), mRNA.		28		29		50	36		
NM_008969.1	Ptgs1	Mus musculus prostaglandin-endoperoxide synthase 1 (Ptgs1), mRNA.		41	28			23	38		74
NM_013602.2	MT1E	Mus musculus metallothionein 1 (Mt1), mRNA			31	50		57	39		24
NM_009994.1	Cyp1b1	Mus musculus cytochrome P450, family 1, subfamily b, polypeptide 1 (Cyp1b1), mRNA.				25		40	40	21	176
NM_009841.2	Cd14	Mus musculus CD14 antigen (Cd14), mRNA.		22	31	34			41		
NM_133836.1	Il15ra	Mus musculus interleukin 15 receptor, alpha chain (Il15ra), mRNA.		22		24		38	41		
NM_010545.2	CD74	Mus musculus CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated) (Cd74), transcript variant 2,			60	22		67	42	22	74
NM_008198.1	H2-Bf	Mus musculus histocompatibility 2, complement component factor B (H2-Bf), mRNA.		31	25	40		33	46		
NM_007796.1	Ctla2a	Mus musculus cytotoxic T lymphocyte-associated protein 2 alpha (Ctla2a)			43	90		42	48		23
NM_009778.1	C3	Mus musculus complement component 3 (C3), mRNA.		35	31	72		71	51		
NM_010382.1	H2-Eb1	Mus musculus histocompatibility 2, class II antigen E beta (H2-Eb1), mRNA.			101	35		72	51		23
NM_010736.1	Ltbr	Mus musculus lymphotoxin B receptor (Ltbr), mRNA.		21				32	51		21
NM_021443.1	Ccl8	Mus musculus chemokine (C-C motif) ligand 8 (Ccl8), mRNA.		33	54	61		31	53		
NM_010378.2	H2-Aa	Mus musculus histocompatibility 2, class II antigen A, alpha (H2-Aa), mRNA.			80	31		81	53	26	77
NM_011335.1	CCL21	Mus musculus chemokine (C-C motif) ligand 21a (leucine) (Ccl21a), mRNA.			27	37		114	56	24	55
NM_007646.2	Cd38	Mus musculus CD38 antigen (Cd38), mRNA.		23	26	39		51	60		
NM_009735.2	B2m	Mus musculus beta-2 microglobulin (B2m), mRNA.			86	37		75	62		72
NM_010379.2	H2-Ab1	Mus musculus histocompatibility 2, class II antigen A, beta 1 (H2-Ab1), mRNA.			68	25		98	63		34
NM_009655.1	Alcam	Mus musculus activated leukocyte cell adhesion molecule (Alcam), mRNA		24	29			39	65		21
NM_010741.1	Ly6c	Mus musculus lymphocyte antigen 6 complex, locus C (Ly6c), mRNA.		29	77	24		68	66		
NM_001001892	H2-K1	Mus musculus histocompatibility 2, K region (H2-K), mRNA.		45	43	27		138	85		
NM_011338.1	Ccl9	Mus musculus chemokine (C-C motif) ligand 9 (Ccl9), mRNA.		31	27	34			89		
NM_008706.1	Nqo1	Mus musculus NAD(P)H dehydrogenase, quinone 1 (Nqo1), mRNA.		33				87	128		38

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score								
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose	TCDD High Dose	
NM_023716.1	TUBB2B	Mus musculus tubulin, beta 2b (Tubb2b), mRNA		-31	-25	-53	-55				-71
Common to 2 Chemicals (high dose)											
NM_007633.1	Ccne1	Mus musculus cyclin E1 (Ccne1), mRNA.			-25	-48	-65	-218			
XM_359386.1	LOC386543	Mus musculus similar to T-cell receptor beta V(E1)-D(1)-J(2.5)			-25	-35		-86			
XM_132882.1	Cd69	Mus musculus CD69 antigen (Cd69), mRNA.		-29				-68			
NM_007610.1	Casp2	Mus musculus caspase 2 (Casp2), mRNA.			-23	-32	-20	-64			
NM_013486.1	Cd2	Mus musculus CD2 antigen (Cd2), mRNA		-41				-59			
NM_009810.1	Casp3	Mus musculus caspase 3, apoptosis related cysteine protease (Casp3), mRNA.				-20	-26	-52			
NM_009424.2	Traf6	Mus musculus Tnf receptor-associated factor 6 (Traf6), mRNA.			-37	-53		-50			
NM_010090.2	Dusp2	Mus musculus dual specificity phosphatase 2 (Dusp2), mRNA.		-22				-50			
XM_147220.1	LOC224114	Mus musculus similar to tyrosine kinase, non-receptor, 2; Cdc42 GTPase-inhibiting protein; P21cdc42Hs kinase; activated p21cdc42Hs				-25		-44			
NM_011949.2	Mapk1	Mus musculus mitogen activated protein kinase 1 (Mapk1)			-22	-30	-23	-40			
NM_009846.1	CD24	Mus musculus CD24a antigen (Cd24a), mRNA.				-54	-59	-35			
NM_009870.2	Cdk4	Mus musculus cyclin-dependent kinase 4 (Cdk4)				-24		-35			
NM_009840.2	Cct8	Mus musculus chaperonin subunit 8 (theta) (Cct8), mRNA.				-27		-24			
XM_203222.2	LOC276756	Mus musculus similar to heat shock protein 86 (LOC276756)			-60	-88		-23			
NM_010786.2	Mdm2	Mus musculus transformed mouse 3T3 cell double minute 2 (Mdm2), mRNA.				-38					-22
NM_010481.1	HSPA9	Mus musculus heat shock protein, A (Hspa9a), mRNA.				30					20
NM_007651.2	Cd53	Mus musculus CD53 antigen (Cd53), mRNA.			38	28	55				90
NM_011701.3	Vim	Mus musculus vimentin (Vim), mRNA.			27	38	29				44
NM_008160.1	Gpx1	Mus musculus glutathione peroxidase 1 (Gpx1), mRNA			34	48	22				24
NM_008551.1	Mapkapk2	Mus musculus MAP kinase-activated protein kinase 2 (Mapkapk2), mRNA.			21	23					22
NM_010161.1	Evi2a	Mus musculus ecotropic viral integration site 2a (Evi2a), mRNA.				23	24	20			
NM_007915.1	Ei24	Mus musculus etoposide induced 2.4 mRNA (Ei24), mRNA.				24	29	21			
NM_133655.1	Cd81	Mus musculus CD 81 antigen (Cd81), mRNA.			26	24	22	22			
NM_009883.1	Cebpb	Mus musculus CCAAT/enhancer binding protein (C/EBP), beta (Cebpb), mRNA.				45	35	23			
NM_007643.2	Cd36	Mus musculus CD36 antigen (Cd36), mRNA.				49	30	23			

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score								
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose	TCDD High Dose	
NM_009656.1	Aldh2	Mus musculus aldehyde dehydrogenase 2, mitochondrial (Aldh2)				24			26		
NM_008528.3	Blnk	Mus musculus B-cell linker (Blnk), mRNA.			23	31		21	27		
NM_021282.1	Cyp2e1	Mus musculus cytochrome P450, family 2, subfamily e, polypeptide 1 Cyp2e1				21			27		
NM_015729.1	Acox1	Mus musculus acyl-Coenzyme A oxidase 1, palmitoyl (Acox1), mRNA.				33		34	28		
NM_010358.2	GSTMS	Mus musculus glutathione S-transferase, mu 1 (Gstm1), mRNA.				21			28		
NM_008390.1	Irf1	Mus musculus interferon regulatory factor 1 (Irf1), mRNA.						49	29		25
NM_007779.1	Csf1r	Mus musculus colony stimulating factor 1 receptor (Csf1r), mRNA.			42	29		35	30		
NM_007669.2	Cdkn1a	Mus musculus cyclin-dependent kinase inhibitor 1A (P21) (Cdkn1a), mRNA.			24	52			33		
NM_007537.1	Bcl2l2	Mus musculus Bcl2-like 2 (Bcl2l2), mRNA.		21				25	33		
NM_010555.2	Il1r2	Mus musculus interleukin 1 receptor, type II (Il1r2), mRNA.			28			29	34		58
NM_010493.2	Icam1	Mus musculus intercellular adhesion molecule (Icam1)			20			45	35		25
NM_007534.1	Bcl2a1b	Mus musculus B-cell leukemia/lymphoma 2 related protein A1b (Bcl2a1b), mRNA.						44	35		38
NM_011693.2	Vcam1	Mus musculus vascular cell adhesion molecule 1 (Vcam1), mRNA.			23			32	38	24	23
NM_007654.1	Cd72	Mus musculus CD72 antigen (Cd72), mRNA.				23		53	38		
XM_132169.1	IGJ	Mus musculus immunoglobulin joining chain (Igj), mRNA.			213	63		60	39		
NM_010381.2	H2-Ea	Mus musculus histocompatibility 2, class II antigen E alpha (H2-Ea), mRNA.						77	40	28	55
NM_010386.2	H2-DMa	Mus musculus histocompatibility 2, class II, locus DMa (H2-DMa), mRNA.			22			50	45		33
NM_021893.2	CD274	Mus musculus programmed cell death 1 ligand 1 (Pcdcl1g1), CD274 antigen (Cd274), mRNA.						57	47		25
NM_009283.2	Stat1	Mus musculus signal transducer and activator of transcription 1 (Stat1), mRNA.		21	38			78	49		
NM_030712.1	Cxcr6	Mus musculus chemokine (C-X-C motif) receptor 6 (Cxcr6),		37	23			81	52		
NM_008371.2	Il7	Mus musculus interleukin 7 (Il7), mRNA.						100	57		23
NM_008349.1	Il10rb	Mus musculus interleukin 10 receptor, beta (Il10rb), mRNA.			24	23		33	57		
NM_010387.2	H2-DMb1	Mus musculus histocompatibility 2, class II, locus Mb1 (H2-DMb1), mRNA.						61	59		28
NM_201645.1-S	Ugt1a1	Mus musculus UDP-glucuronosyltransferase 1 family, member 1						22	59		39
NM_010187.1	Fcgr2b	Mus musculus Fc receptor, IgG, low affinity IIb (Fcgr2b), mRNA.			32			26	63		46
NM_008873.2	Plau	Mus musculus plasminogen activator, urokinase (Plau), mRNA.						41	63		34
NM_010407.3	Hck	Mus musculus hemopoietic cell kinase (Hck), mRNA.			27			65	65		43

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score								
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose	TCDD High Dose	
NM_133990.3	Il13ra1	Mus musculus interleukin 13 receptor, alpha 1 (Il13ra1)		32				40	66		
NM_009876.2	Cdkn1c	Mus musculus cyclin-dependent kinase inhibitor 1C (P57) (Cdkn1c), mRNA.		24	21			34	67		
NM_009366.1	TSC22D1	Mus musculus transforming growth factor beta 1 induced transcript 4 (Tgfb1i4), TSC22 domain family, member 1 (tsc22d1) mRNA.						104	75		20
NM_010654.1	Klrd1	Mus musculus killer cell lectin-like receptor, subfamily D, member 1 (Klrd1), mRNA.						62	82		25
NM_007572.1	C1qa	Mus musculus complement component 1, q subcomponent, alpha polypeptide (C1qa), mRNA.		52	74			157	113		
NM_011234.2	Rad51	Mus musculus RAD51 homolog (S. cerevisiae) (Rad51), mRNA.		-25		-36		-58			
Unique to 1 Chemical (high dose)											
NM_011997.1	Casp8ap2	Mus musculus caspase 8 associated protein 2 (Casp8ap2), mRNA.						-21	-54		
NM_008279.1	Map4k1	Mus musculus mitogen activated protein kinase kinase kinase kinase 1 (Map4k1), mRNA.							-46		
NM_009192.1	Sla	Mus musculus src-like adaptor (Sla), mRNA.							-38		
NM_010494.1	Icam2	Mus musculus intercellular adhesion molecule 2 (Icam2), mRNA.							-38		
NM_011488.2	Stat5a	Mus musculus signal transducer and activator of transcription 5A (Stat5a), mRNA.							-34		
NM_007987.1	FAS	Mus musculus FAS tumor necrosis factor receptor superfamily, member 6 (Tnfrsf6), mRNA.							-33		
XM_133034.1	Ube2h	Mus musculus ubiquitin-conjugating enzyme E2H (Ube2h), mRNA.							-28		
NM_010798.1	Mif	Mus musculus macrophage migration inhibitory factor (Mif), mRNA.							-27		
NM_009811.2	Casp6	Mus musculus caspase 6 (Casp6), mRNA.							-27		
NM_009952.1	Creb1	Mus musculus cAMP responsive element binding protein 1 (Creb1),							-26		
NM_178654.2	Pkn2	Mus musculus protein kinase N2 (Pkn2), mRNA							-23		
NM_009029.1	Rb1	Mus musculus retinoblastoma 1 (Rb1), mRNA.						-25	-21		
NM_011331	Ccl12	Mus musculus chemokine (C-C motif) ligand 12 (Ccl12), mRNA.						51	20		
NM_010580.1	Itgb5	Mus musculus integrin beta 5 (Itgb5), mRNA.							20		
NM_009845.1	Cd22	Mus musculus CD22 antigen (Cd22), mRNA.						34	22		
NM_008416.1	Junb	Mus musculus Jun-B oncogene (Junb), mRNA.							22		
NM_019639.2	Ubc	Mus musculus ubiquitin C (Ubc), mRNA			30			24	22		
NM_016778.1	Bok	Mus musculus Bcl-2-related ovarian killer protein (Bok), mRNA							22		
NM_010648.1	Klra3	Mus musculus killer cell lectin-like receptor, subfamily A, member 3 (Klra3), mRNA.						38	22		

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score							
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose	TCDD High Dose
NM_010360.1	Gstm5	Mus musculus glutathione S-transferase, mu 5 (Gstm5), mRNA.							23	
NM_019971.2	Pdgfc	Mus musculus platelet-derived growth factor, C polypeptide							23	
XM_354704.1	LOC380793	Mus musculus similar to Ig gamma-2A chain C region secreted form							24	
NM_009769.2	Klf5	Mus musculus Kruppel-like factor 5 (Klf5), mRNA.							25	
NM_010637.1	Klf4	Mus musculus Kruppel-like factor 4 (gut) (Klf4), mRNA.							26	
NM_007609.1	Casp4	Mus musculus caspase 4, apoptosis-related cysteine protease (Casp4), mRNA.							26	
NM_009370.2	Tgfr1	Mus musculus transforming growth factor, beta receptor I (Tgfr1), mRNA.							27	
NM_033622.1	Tnfrsf13b	Mus musculus tumor necrosis factor (ligand) superfamily, member 13b							27	
NM_013819.1	H2-M3	Mus musculus histocompatibility 2, M region locus 3 (H2-M3), mRNA.						26	27	
NM_011609.2	Tnfrsf1a	Mus musculus tumor necrosis factor receptor superfamily, member 1a (Tnfrsf1a), mRNA.							27	
NM_016741.1	Scarb1	Mus musculus scavenger receptor class B, member 1 (Scarb1), mRNA.						28	28	
NM_009142.2	Cx3cl1	Mus musculus chemokine (C-X3-C motif) ligand 1 (Cx3cl1), mRNA.							28	
NM_010560.2	Il6st	Mus musculus interleukin 6 signal transducer (Il6st), mRNA.						28	28	
NM_009983.2	Ctsd	Mus musculus cathepsin D (Ctsd), mRNA.						41	28	
NM_010591.1	Jun	Mus musculus Jun oncogene (Jun), mRNA.							29	
NM_008518.1	Ltb	Mus musculus lymphotoxin B (Ltb), mRNA.						40	30	
NM_009742.2	Bcl2a1a	Mus musculus B-cell leukemia/lymphoma 2 related protein A1a (Bcl2a1a), mRNA.						22	30	
XM_125954.4	ErbB3	Mus musculus v-erb-b2 erythroblastic leukemia viral oncogene homolog 3 (avian) (ErbB3), mRNA.							30	
NM_013598.1	Kitl	Mus musculus kit ligand (Kitl), mRNA.						35	30	
NM_009741.2	Bcl2	Mus musculus B-cell leukemia/lymphoma 2 (Bcl2), mRNA.							30	
NM_207648.1	H2-Q6	Mus musculus histocompatibility 2, Q region locus 6 (H2-Q6), mRNA.						38	31	
NM_008510.1	Xcl1	Mus musculus chemokine (C motif) ligand 1 (Xcl1), mRNA.						26	32	
NM_008399.1	Itgae	Mus musculus integrin, alpha E, epithelial-associated (Itgae), mRNA.						23	32	
NM_007778.1	Csf1	Mus musculus colony stimulating factor 1 (macrophage) (Csf1), mRNA.						22	33	
NM_008808.2	Pdgfa	Mus musculus platelet derived growth factor, alpha (Pdgfa), mRNA							34	
NM_008357.1	Il15	Mus musculus interleukin 15 (Il15), mRNA.						39	34	
NM_009046.2	Relb	Mus musculus avian reticuloendotheliosis viral (v-rel) oncogene related B (Relb), mRNA.						60	36	

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score								
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose	TCDD High Dose	
NM_010549.1	Il11ra1	Mus musculus interleukin 11 receptor, alpha chain 1 (Il11ra1), mRNA.						31	36		
NM_008361.2	Il1b	Mus musculus interleukin 1 beta (Il1b), mRNA.						92	36		
NM_010740.1	CD93	Mus musculus complement component 1, q subcomponent, receptor 1 (C1qr1),CD93 antigen (Cd93), mRNA.								37	
NM_021334.1	Itgax	Mus musculus integrin alpha X (Itgax), mRNA.						30	43		
NM_009854.1	Cd7	Mus musculus CD7 antigen (Cd7), mRNA.						30	43		
NM_011330.1	Ccl11	Mus musculus small chemokine (C-C motif) ligand 11 (Ccl11), mRNA.			32			51	44		
NM_008368.3	Il2rb	Mus musculus interleukin 2 receptor, beta chain (Il2rb), mRNA.						47	45		
NM_008348.1	Il10ra	Mus musculus interleukin 10 receptor, alpha (Il10ra), mRNA.						51	48		
NM_010388.1	H2-DMb2	Mus musculus histocompatibility 2, class II, locus Mb2 (H2-DMb2), mRNA.						68	48		
NM_009853.1	Cd68	Mus musculus CD68 antigen (Cd68), mRNA.						38	52		
NM_008372.3	Il7r	Mus musculus interleukin 7 receptor (Il7r), mRNA.			30			39	53		
NM_013566.1	Itgb7	Mus musculus integrin beta 7 (Itgb7), mRNA.						73	59		
NM_141803162	Ccl2	Mus musculus chemokine (C-C motif) ligand 2 (Ccl2), mRNA.						40	66		
NM_011332.2	Ccl17	Mus musculus chemokine (C-C motif) ligand 17 (Ccl17), mRNA.						32	69		
NM_009139.1	Ccl6	Mus musculus chemokine (C-C motif) ligand 6 (Ccl6), mRNA.							78		
NM_010784.2	Mdk	Mus musculus midkine (Mdk), mRNA.						55	105		
NM_009151.2	SELPLG	Mus musculus selectin, platelet (p-selectin) ligand (Selpl), mRNA.					-32				
NM_033075.2	D17H6S56E-5	Mus musculus DNA segment, Chr 17, human D6S56E 5 (D17H6S56E-5), mRNA.					-23				
NM_013674.1	Irf4	Mus musculus interferon regulatory factor 4 (Irf4), mRNA.			28		33				
NM_013654.2	Ccl7	Mus musculus chemokine (C-C motif) ligand 7 (Ccl7), mRNA.		24							
NM_008714.2	Notch1	Mus musculus Notch gene homolog 1 (Drosophila) (Notch1), mRNA.								-45	
NM_010849.2	Myc	Mus musculus myelocytomatosis oncogene (Myc), mRNA.								-30	
NM_008529.2	Ly6e	Mus musculus lymphocyte antigen 6 complex, locus E (Ly6e), mRNA				-28				-25	
NM_175860.1	GIMAP1	Mus musculus GTPase, IMAP family member 1 (Gimap1), transcript variant 2, mRNA								-24	
NM_010918.1	Nktr	Mus musculus natural killer tumor recognition sequence (Nktr), mRNA.								-22	
NM_008562.2	Mcl1	Mus musculus myeloid cell leukemia sequence 1 (Mcl1), mRNA.								-21	
NM_007639.1	CD1D	Mus musculus CD1d1 antigen (Cd1d1), mRNA.								21	
NM_008155.1	Gpi1	Mus musculus glucose phosphate isomerase 1 (Gpi1), mRNA.								21	

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score						
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose
NM_007631.1	Ccnd1	Mus musculus cyclin D1 (Ccnd1), mRNA.				27	29		
NM_013671.2	Sod2	Mus musculus superoxide dismutase 2, mitochondrial (Sod2), mRNA.				27			
NM_198640.1	AI324046	Mus musculus expressed sequence AI324046 (AI324046), mRNA.	-32			31			
NM_009736.1	Bag1	Mus musculus Bcl2-associated athanogene 1 (Bag1), mRNA.				33			
NM_013653.1	Ccl5	Mus musculus chemokine (C-C motif) ligand 5 (Ccl5), mRNA.			33	39	50		
NM_009856.1	Cd83	Mus musculus CD83 antigen (Cd83), mRNA.					49		31
XM_129752.1	Casp8	Mus musculus caspase 8 (Casp8)							20
NM_021099.2	Kit	Mus musculus kit oncogene (Kit), mRNA.							22
NM_007464.1	Birc3	Mus musculus baculoviral IAP (inhibitor of apoptosis protein) repeat-containing 3 (BIRC), mRNA.							24
NM_009812.1	Casp8	Mus musculus caspase 8 (Casp8), transcript variant 1, mRNA							25
NM_010362.1	Gsto1	Mus musculus glutathione S-transferase omega 1 (Gsto1), mRNA							26
NM_010431.1	Hif1a	Mus musculus hypoxia inducible factor 1, alpha subunit (Hif1a),							29
NM_008206.1	H2-Oa	Mus musculus histocompatibility 2, O region alpha locus (H2-Oa), mRNA.					35		36
NM_011659.1	Tnfrsf4	Mus musculus tumor necrosis factor receptor superfamily, member 4 (Tnfrsf4)							38
NM_007564.2	Zfp361l1	Mus musculus zinc finger protein 36, C3H type-like 1 (Zfp361l1), mRNA.				22			43
NM_009801.3	Car2	Mus musculus carbonic anhydrase 2 (Car2), mRNA.				21			
NM_008869.2	Pla2g4a	Mus musculus phospholipase A2, group IVA (cytosolic, calcium-dependent) (Pla2g4a),		25					
NM_013642.1	Dusp1	Mus musculus dual specificity phosphatase 1 (Dusp1), mRNA.				26			
NM_008367.2	Il2ra	Mus musculus interleukin 2 receptor, alpha chain (Il2ra), mRNA.					39		
NM_009915.1	Ccr2	Mus musculus chemokine (C-C) receptor 2 (Ccr2), mRNA.				23			
NM_011611.1	CD40	Mus musculus tumor necrosis factor receptor superfamily, member 5 (Tnfrsf5), CD40 antigen (CD40), transcript variant 1 mRNA.					30		
NM_013706.1	Cd52	Mus musculus CD52 antigen (Cd52), mRNA.	-22		22		35		
XM_126545.2	LOC217069	Mus musculus similar to estrogen-responsive finger protein					39		
NM_008360.1	Il18	Mus musculus interleukin 18 (Il18), mRNA.					20		
NM_013599.2	Mmp9	Mus musculus matrix metalloproteinase 9 (Mmp9), mRNA.					34		
NM_007719.1	Ccr7	Mus musculus chemokine (C-C motif) receptor 7 (Ccr7), mRNA.					49		
NM_053108.2	GLRX	Mus musculus glutaredoxin, mRNA.			28				
NM_021274.1	Cxcl10	Mus musculus chemokine (C-X-C motif) ligand 10 (Cxcl10)					39		

Supplemental Material, Table 2

List of All Genes Differentially Expressed by DEX, DES, CPS and TCDD^a

GenBank #	Symbol	Gene Name	DIFF Score							
			CPS Low Dose	CPS High Dose	DES Low Dose	DES High Dose	DEX Low Dose	DEX High Dose	TCDD Low Dose	TCDD High Dose
NM_008927.1	Map2k1	Mus musculus mitogen activated protein kinase kinase 1 (Map2k1), mRNA.						29		
NM_013655.2	Cxcl12	Mus musculus chemokine (C-X-C motif) ligand 12 (Cxcl12), transcript variant 2, mRNA.						49		
NM_011095.1	LILRB3	Mus musculus paired-Ig-like receptor B (Pirb), leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (Lilrb3), mRNA						26		

^aDifferential expression is relative to the matched vehicle control, N=4 female B6C3F1 mice.

All animals were treated for five consecutive days as described in Materials and Methods.

DEX High 5.0 mg/kg/day, DEX Low 0.5 mg/kg/day, DES High 8.0 mg/kg/day, DES Low 0.8 mg/kg/day,

CPS High 50.0 mg/kg/day, CPS Low 5.0 mg/kg/day, TCDD High 3.0 µg/kg/day, TCDD Low 0.3 µg/kg/day

Supplemental Material Tables 3A-3C Ingenuity Pathway Analysis Pathway and Function Analyses for DEX, DES, CPS, and TCDD
Table 3A Global Pathway Comparison for DEX, DES, CPS and TCDD^a

Pathway Name	# Genes in Pathway	DEX		DES		CPS		TCDD	
		p-value	# Genes Altered	p-value	# Genes Altered	p-value	# Genes Altered	p-value	# Genes Altered
Common to Four Chemicals									
Dendritic Cell Maturation	143	3.2E-17	23	2.0E-6	10	4.0E-3	5	1.1E-15	15
CD28 Signaling in T-helper Cells	108	1.0E-12	17	5.6E-12	14	5.1E-14	14	3.3E-4	5
Crosstalk between Dendritic and NK Cells	78	1.3E-11	14	8.4E-3	4	2.7E-4	5	4.1E-6	6
CTLA4 Signaling in Cytotoxic T-Lymphocytes	84	6.8E-8	11	9.8E-7	9	1.0E-10	8	9.4E-5	5
T-helper Cell Differentiation	37	7.9E-8	8	5.4E-4	4	2.5E-3	3	1.6E-6	5
Communication between Innate and Adaptive Immune Cells	70	1.2E-7	10	7.1E-6	7	1.6E-4	5	5.8E-4	4
Natural Killer (NK) Cell Signaling	89	4.7E-4	95	3.0E-4	6	4.9E-4	5	1.4E-3	4
Common to Three Chemicals									
T-cell Receptor Signaling	95	1.2E-12	16	3.5E-14	15	6.3E-15	14		
Antigen Presentation	29	3.4E-10	9	2.1E-4	4			2.1E-12	8
Primary Immunodeficiency Signaling	45	1.0E-9	10	5.0E-10	9	9.0E-10	8		
Cytotoxic T-lymphocyte Mediated Apoptosis of Target Cells	26	3.7E-9	8	5.8E-6	5	3.6E-5	4		
IL-4 Signaling	66	5.7E-8	10	4.3E-6	7			2.1E-9	8
B-cell Receptor Signaling	141	2.5E-7	13	9.9E-5	8	6.0E-4	6		
IL-10 Signaling	59	2.9E-7	9	3.1E-3	4			4.1E-3	3
IL-15 Signaling	60	3.8E-6	8	3.3E-3	4	9.7E-3	3		
IL-2 Signaling	53	1.7E-5	7	2.1E-3	4	6.9E-3	3		
JAK/STAT Signaling	61	3.6E-4	6	3.5E-3	4	1.0E-2	3		
Common to Two Chemicals									
IL-6 Signaling	86	8.5E-7	10	2.5E-4	6				
Apoptosis Signaling	84	6.0E-6	9					1.1E-3	4
IL-22 Signaling	26	4.4E-5	5	2.3E-3	3				
Interferon Signaling	26	6.5E-4	4			8.9E-4	3		
IL-17 Signaling	72	8.8E-4	6	6.3E-3	4				
Unique to One Chemical									
p38 MAPK Signaling	94	1.8E-6	10						
NF-κB Signaling	139	6.2E-5	10						
Chemokine Signaling	71	8.2E-4	6						
Death Receptor Signaling	58	2.7E-4	6						
Acute Phase Response Signaling	166	2.7E-4	10						
TGF-β Signaling	78	1.1E-3	6						
GM-CSF Signaling	62	2.7E-3	5						
IL-8 Signaling	161	3.7E-3	8						
IL-3 Signaling	69	4.4E-3	5						
IL-15 Production	25	6.6E-3	3						
B-cell Activating Factor	39	3.1E-3	4						
Complement	33					1.8E-3	3		

^a Treatments compared to matched vehicle control, Criteria for inclusion: Illumina DIFF Score |≥20|, IPA pathway p≤0.01 AND minimum 3 genes altered. N=4 female B6C3F1 mice. All animals were treated for five consecutive days as described in Materials and Methods. DEX 5.0 mg/kg/day, DES 8.0 mg/kg/day, CPS 50.0 mg/kg/day, TCDD 3.0 μg/kg/day

Supplemental Material Tables 3A-3C Ingenuity Pathway Analysis Pathway and Function Analyses for DEX, DES, CPS, and TCDD
 Table 3B Pathways and Functions Represented by Genes Differentially Expressed by Multiple Chemicals ^a

	<u>DEX/DES/CPS/TCDD</u>			<u>DEX/DES/CPS</u>			<u>DEX/DES/TCDD</u>		
	p-value	# Genes Up	# Genes Down	p-value	# Genes Up	# Genes Down	p-value	# Genes Up	# Genes Down
Total number of genes altered		11	6		13	49		16	0
Pathway									
Dendritic Cell Maturation	8.3E-4	3	0				9.9E-6	4	0
Natural Killer Cell Signaling	4.9E-6	3	1						
T-cell Receptor Signaling				2.2E-16	0	13			
CD28 Signaling in T-helper Cells				5.7E-14	0	12			
Primary Immunodeficiency Signaling				1.7E-11	0	8			
CTLA4 Signaling in Cytotoxic T Lymphocytes				9.4E-8	0	7			
Cytotoxic T-lymphocyte Mediated Apoptosis of Target Cells				2.1E-4	0	3			
Communication between Innate and Adaptive Immune Cells				2.8E-4	0	4			
B-cell Receptor Signaling				4.4E-4	0	5			
IL-2 Signaling				1.8E-3	0	3			
IL-15 Signaling				2.5E-3	1	3			
Leukocyte Extravasation Signaling				8.3E-3	0	4			
Antigen Presentation							1.5E-8	4	0
IL-4 Signaling							4.2E-7	4	0
Function									
<u>Cell Type</u>									
Apoptosis									
Leukocyte	2.3E-5	4	0	2.1E-6	0	7			
Lymphocyte				1.5E-7	0	6			
T-cell				5.0E-5	0	4			
Phagocyte	1.7E-4	3	0						
Antigen Presentation	1.7E-3	3	1	3.5E-7	3	7			
Immunological Disease				2.1E-6	0	8			
Autoimmune Disease				4.8E-5	0	6			
Inflammatory Disease				3.1E-6	2	7			
Immune Cell Trafficking									
Migration									
Lymphocyte				8.6E-6	1	4			
Leukocyte				1.3E-5	3	5			
Activation									
Mononuclear leukocyte				1.1E-5	1	4			
Leukocyte				2.5E-5	2	4			

Supplemental Material Tables 3A-3C Ingenuity Pathway Analysis Pathway and Function Analyses for DEX, DES, CPS, and TCDD
Table 3B Pathways and Functions Represented by Genes Differentially Expressed by Multiple Chemicals ^a

		<u>DEX/DES/CPS/TCDD</u>			<u>DEX/DES/CPS</u>			<u>DEX/DES/TCDD</u>		
		p-value	# Genes	# Genes	p-value	# Genes	# Genes	p-value	# Genes	# Genes
			Up	Down		Up	Down		Up	Down
Cell Movement	T-cell				5.9E-5	0	4			
	Leukocyte				5.6E-5	4	3			
	Neutrophil				1.3E-3	2	2			
Chemotaxis	Leukocyte				5.0E-4	3	2			
	Mononuclear				2.7E-3	2	1			
	Leukocyte									
Cell Mediated Immune Response										
Development	T-cell				3.18E-15	1	14	1.8E-3	3	0
Differentiation	T-cell				6.3E-9	0	8			
Proliferation					1.2E-7	0	4			
Inflammatory Response										
					3.8E-5	5	2			
Humoral Immune Response										
Quantity	B-cell				3.2E-3	1	2			

^a High dose treatments compared to matched vehicle control, N=4 female B6C3F1 mice. All animals were treated for five consecutive days as described in Materials and Methods. DEX 5.0 mg/kg/day, DES 8.0 mg/kg/day, CPS 50.0 mg/kg/day, TCDD 3.0 µg/kg/day
Criteria for inclusion: Illumina DIFF Score |≥20|, IPA pathway/function p≤0.01 AND minimum 3 genes altered
DEX/CPS/TCDD (6 genes) AND DES/CPS/TCDD (2 genes) did not alter any pathways or functions per the stated criteria.

Supplemental Material Tables 3A-3C Ingenuity Pathway Analysis Pathway and Function Analyses for DEX, DES, CPS, and TCDD
Table 3C Pathways and Functions Represented by Genes Differentially Expressed by a Single Chemical^a

	Unique to DEX			Unique to DES			Unique to TCDD		
	p-value	# Genes Up	# Genes Down	p-value	# Genes Up	# Genes Down	p-value	# Genes Up	# Genes Down
Total number of genes altered		50	12		8	8		10	0
Pathway									
Dendritic Cell Maturation	3.2E-7	7	1						
Crosstalk between Dendritic and Natural Killer Cells	1.6E-6	5	1						
P38 MAPK Signaling	4.6E-6	3	3						
Apoptosis	4.5E-5	3	2						
Death Receptor Signaling	1.5E-4	2	2						
IL-15 Signaling	1.8E-4	3	1						
Cytotoxic T-lymphocyte Mediated Apoptosis of Target Cells	2.4E-4	1	2						
Antigen Presentation	3.3E-4	3	0						
Chemokine Signaling	3.4E-4	4	0						
TGF- β Signaling	4.2E-4	3	1						
T-helper Cell Differentiation	6.8E-4	3	0						
IL-6 Signaling	7.0E-4	4	0						
IL-2 Signaling	2.0E-3	2	1						
IL-10 Signaling	2.7E-3	3	0						
NF- κ B Signaling	4.1E-3	4	0						
B-cell Receptor Signaling	4.3E-3	3	1						
Communication between Innate and Adaptive Immune Cells	4.3E-3	3	0						
IL-17 Signaling	4.7E-3	3	0						
Acute Phase Response Signaling	7.6E-3	4	0						
Function									
Antigen Presentation									
	Cell Type								
		1.3E-12	15	2	3.8E-4	3	0		
Inflammatory Response									
	Quantity								
	Macrophage	1.3E-12	10	1					
	Phagocyte	6.0E-12	11	1					
	Neutrophil	8.5E-8	6	1					
	Inflammation	5.0E-8	7	1					
	Phagocytosis	1.0E-4	3	1					
Apoptosis									
		7.4E-10	9	4	3.6E-4	2	2		
	Leukocyte	1.1E-7	5	3					
	Phagocyte	2.0E-6	4	2					
	Neutrophil	7.4E-4	2	1					

Supplemental Material Tables 3A-3C Ingenuity Pathway Analysis Pathway and Function Analyses for DEX, DES, CPS, and TCDD
Table 3C Pathways and Functions Represented by Genes Differentially Expressed by a Single Chemical^a

		Unique to DEX			Unique to DES			Unique to TCDD		
		p-value	# Genes Up	# Genes Down	p-value	# Genes Up	# Genes Down	p-value	# Genes Up	# Genes Down
	T-cell	1.2E-3	1	2						
	Macrophage	1.7E-3	2	1				4.7E-6	3	0
Cell Growth and Proliferation										
Proliferation	Leukocyte	1.5E-6	4	3						
	Phagocyte	2.5E-6	2	2						
	Macrophage	7.6E-5	1	2						
	Lymphocyte	1.4E-4	2	3						
	B-cell	4.9E-4	1	2						
	T-cell	7.4E-3	1	2						
Growth	Mononuclear leukocyte	6.8E-4	3	0						
Inflammatory Disease		2.5E-10	12	1						
Immune Cell Trafficking										
Cell Movement	Leukocyte	4.8E-9	10	1						
	Phagocyte	2.3E-7	7	1	3.2E-4	2	1			
	Mononuclear leukocyte	5.2E-7	6	1						
	Neutrophil	5.6E-7	6	1						
	T-cell	1.4E-5	3	1						
Migration	Lymphocyte	4.2E-7	5	1						
	Leukocyte	1.4E-8	10	1	1.7E-3	2	1			
	Mononuclear leukocyte	4.6E-7	6	1						
	Phagocyte	3.6E-6	5	1						
	Neutrophil	3.2E-4	3	1						
	APC	1.1E-3	3	0						
Chemotaxis		2.2E-8	9	0						
Adhesion	Leukocyte	1.2E-7	7	0						
	Mononuclear leukocyte	3.9E-5	4	0						
Recruitment	Leukocyte	5.2E-7	7	0						
	Phagocyte	4.1E-6	6	0						
	Neutrophil	2.4E-5	5	0						
	Mononuclear Leukocyte	9.0E-5	3	0						

Supplemental Material Tables 3A-3C Ingenuity Pathway Analysis Pathway and Function Analyses for DEX, DES, CPS, and TCDD
Table 3C Pathways and Functions Represented by Genes Differentially Expressed by a Single Chemical^a

		Unique to DEX			Unique to DES			Unique to TCDD		
		p-value	# Genes Up	# Genes Down	p-value	# Genes Up	# Genes Down	p-value	# Genes Up	# Genes Down
Accumulation	Leukocyte	6.3E-7	5	2						
	Phagocyte	7.9E-7	4	2						
	T-cell	1.1E-4	2	1						
	Macrophage	5.3E-4	2	1						
	Neutrophil	9.9E-4	2	1						
Activation	Mononuclear leukocyte	1.3E-5	4	1						
	Leukocyte	2.2E-6	5	2						
	T-cell	1.4E-3	2	1						
Cell Mediated Immune Response										
Development	T-cell	2.1E-7	7	2						
Differentiation	T- helper cell	2.4E-3	2	1						
Humoral Immune Response										
Quantity	B-cell	1.3E-5	4	1						
Proliferation	B-cell	4.9E-4	1	2						
Immunological Disease										
	Autoimmune Disease	5.8E-4	5	0						
Hypersensitivity										
		3.2E-4	3	0						

^a High dose treatments compared to matched vehicle control, N=4 female B6C3F1 mice.
 All animals were treated for five consecutive days as described in Materials and Methods.
 DEX 5.0 mg/kg/day, DES 8.0 mg/kg/day, CPS 50.0 mg/kg/day, TCDD 3.0 µg/kg/day
 Criteria for inclusion: Illumina DIFF Score |≥20|, IPA pathway/function p≤0.01 AND minimum 3 genes altered
 Unique to CPS (2 genes) did not alter any pathways or functions per the stated criteria

Supplemental Material, Table 4
Ingenuity Pathway Analysis Function Comparison for DEX, DES, CPS and TCDD^a

Function	Cell Type	# Genes Altered			
		DEX	DES	CPS	TCDD
Cell Mediated Immunity		45	28	23	11
Development	General	35	22	20	10
	T-cell	35	21	20	10
	T-helper cell	5			
Differentiation	General	15	8	10	
	T-cell	15	8	10	
	T-helper cell	10			
Humoral Immune Response		24	16	12	8
Quantity	General	14	8	5	
	B-cells	14	8	5	
Apoptosis		40	28	22	16
	Leukocyte	26	17	14	11
	Mononuclear leukocyte	12	9		
	Lymphocyte	11	8	7	
	T-cell	9	6	5	
	Neutrophil	8	5		
	Macrophage	8	5		5
	Phagocyte	16	9		
Cell Growth and Proliferation		50	30	20	13
Proliferation	General	42	26	18	10
	Leukocyte	26	15	12	
	Lymphocyte	23	14	11	8
	T-cell	16	10	8	5
	B-cell	9	5		
Growth	General	12	8	7	
	Leukocyte	8	5	5	
	Mononuclear leukocyte	7			
	Lymphocyte	6			
	T-cell	4			
Antigen Presentation		48	30	24	16
Immune Cell Trafficking		53	33	26	20
Migration	General	27	16	11	9
	Leukocyte	27	16	11	9
	Mononuclear leukocyte	15		6	
	Lymphocyte	14	9	5	3
	T-cell	7	5		
	Neutrophil	8			5
	Phagocyte	10			
	Antigen Presenting Cell	5	5		
Cell Movement	General	25	15	11	7
	Leukocyte	25	15	11	
	Mononuclear leukocyte	12	7		
	Lymphocyte	7	5		
	T-cell	5			
	Neutrophil	15	9	7	
	Phagocyte	18	11		6
	Macrophage	6			
	Antigen Presenting Cell	8			

Supplemental Material, Table 4
Ingenuity Pathway Analysis Function Comparison for DEX, DES, CPS and TCDD^a

Function	Cell Type	# Genes Altered			
		DEX	DES	CPS	TCDD
Chemotaxis		19	11	8	5
Activation	General	18	11	9	
	Leukocyte	18	11	9	
	Mononuclear leukocyte	13	10	7	
	Lymphocyte				
	T-cell	10	8	6	
	Phagocyte	7	5	5	
	Macrophage	5			
Recruitment	General	15	6	5	
	Leukocyte	15	6	5	
	Mononuclear leukocyte	6			
	Neutrophil	9			
	Phagocyte	12	5		
	Macrophage	5			
Accumulation	General	15	6		8
	Leukocyte	15	6		8
	Mononuclear leukocyte	8			6
	Lymphocyte	6			
	T-cell	5			
	Neutrophil				
	Phagocyte	8			
	Macrophage	5			
Adhesion	General	12			
	Leukocyte	12			
	Mononuclear leukocyte	7			
Inflammatory Disease		38	19	14	10
Inflammatory Response		77	47	38	27
Quantity	General	24	9	8	11
	Neutrophil	11			
	Macrophage	17	6	5	6
	Phagocyte	22	7	8	9
Inflammation		18	10	7	5
Phagocytosis		10			
Immunological Disease		33	17	16	10
Autoimmune Disease		21	12	10	8
Infectious Disease		9			

^a High dose treatments compared to matched vehicle control, N=4 female B6C3F1 mice. All animals were treated for five consecutive days as described in Materials and Methods. DEX 5.0 mg/kg/day, DES 8.0 mg/kg/day, CPS 50.0 mg/kg/day, TCDD 3.0 µg/kg/day. Criteria for inclusion: Illumina DIFF Score | ≥ 20 |, IPA function/pathway $p \leq 0.01$ AND minimum 5 genes altered