Table of differentially regulated genes in WNV-infected RPE with a 2-fold or greater change, as determined by microarray.

Fold change ([Virus] vs [Control])	Regulation ([Virus] vs [Control])	Gene Description	Gene Symbol
3.52	up	actinin, alpha 2	ACTN2
2.33	up	adenosine deaminase, RNA-specific	ADAR
3.08	up	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3F | apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3G	APOBEC3F|APOBEC3G
3.28	up	apolipoprotein L, 1	APOL1
6.30	up	apolipoprotein L, 2	APOL2
7.94	up	apolipoprotein L, 6	APOL6
2.60	up	ADP-ribosylation factor-like 5B	ARL5B
2.00	up	activating transcription factor 3	ATF3
2.88	up	ATPase, class V, type 10A	ATP10A
2.12	up	beta-2-microglobulin	B2M
2.46	up	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 2	B3GNT2
2.06	up	BMP and activin membrane-bound	BAMBI

		inhibitor homolog (Xenopus laevis)	
2.97	up	basic leucine zipper transcription factor, ATF-like 2	BATF2
4.99	up	baculoviral IAP repeat-containing 3	BIRC3
2.48	up	basic leucine zipper nuclear factor 1 (JEM-1)	BLZF1
5.87	up	bone marrow stromal cell antigen 2	BST2
3.14	up	butyrophilin, subfamily 3, member A1	BTN3A1
2.98	up	butyrophilin, subfamily 3, member A2	BTN3A2
2.98	up	butyrophilin, subfamily 3, member A3	BTN3A3
2.94	up	chromosome 1 open reading frame 38	C1orf38
2.89	up	chromosome 21 open reading frame 91	C21orf91
4.94	up	complement component 3a receptor 1	C3AR1
2.17	up	complement component 4A (Rodgers blood group) | complement component 4B (Childo blood group)	C4A|C4B

2.07	up	chromosome 6 open reading frame 192	C6orf192
3.40	up	caspase 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase)	CASP1
2.41	up	caspase 7, apoptosis-related cysteine peptidase	CASP7
25.23	up	chemokine (C-C motif) ligand 5	CCL5
2.93	up	CCR4 carbon catabolite repression 4-like (S. cerevisiae)	CCRN4L
5.38	up	CD274 molecule	CD274
9.27	up	CD38 molecule	CD38
3.97	up	complement factor B	CFB
4.08	up	complement factor B	CFB
3.51	up	complement factor B	CFB
3.99	up	cholesterol 25-hydroxylase	CH25H
5.20	up	cytidine monophosphate (UMP-CMP) kinase 2, mitochondrial	CMPK2
2.03	up	cytoplasmic polyadenylation element binding protein 3	CPEB3
2.36	up	colony stimulating factor 1	CSF1

		(macrophage)	
2.02	up	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	CXCL1
24.15	up	chemokine (C-X-C motif) ligand 10	CXCL10
15.16	up	chemokine (C-X-C motif) ligand 11	CXCL11
3.38	up	cytochrome P450, family 2, subfamily J, polypeptide 2	CYP2J2
2.38	up	DNA-damage-inducible transcript 3	DDIT3
2.30	up	D-aspartate oxidase	DDO
30.59	up	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58	DDX58
19.08	up	DEAD (Asp-Glu-Ala-Asp) box polypeptide 60	DDX60
23.07	up	DEAD (Asp-Glu-Ala-Asp) box polypeptide 60-like	DDX60L
5.30	up	DEXH (Asp-Glu-X-His) box polypeptide 58	DHX58
2.08	up	dicer 1, ribonuclease type III	DICER1
7.98	up	deltex 3-like (Drosophila)	DTX3L
6.92	up	early growth response 1	EGR1

2.75	up	EH-domain containing 4	EHD4
4.09	up	eukaryotic translation initiation factor 2-alpha kinase 2	EIF2AK2
2.48	up	E74-like factor 1 (ets domain transcription factor)	ELF1
2.10	up	ELOVL family member 7, elongation of long chain fatty acids (yeast)	ELOVL7
2.04	up	endonuclease domain containing 1	ENDOD1
13.60	up	epithelial stromal interaction 1 (breast)	EPSTI1
2.11	up	endoplasmic reticulum aminopeptidase 1	ERAP1
2.70	up	family with sequence similarity 122C	FAM122C
2.01	up	family with sequence similarity 26, member E	FAM26E
2.70	up	family with sequence similarity 46, member A	FAM46A
4.52	up	chromosome 19 open reading frame 66	FLJ11286

9.70	up	guanylate binding protein 1, interferon-inducible, 67kDa | interferon-induced guanylate-binding protein 1 pseudogene	GBP1|LOC400759
4.98	up	guanylate binding protein 3	GBP3
15.42	up	guanylate binding protein 4	GBP4
6.02	up	guanylate binding protein 5	GBP5
3.06	up	GTP cyclohydrolase 1 (dopa-responsive dystonia)	GCH1
2.14	up	glucosaminyl (N-acetyl) transferase 4, core 2 (beta-1,6-N-acetylglucosaminyltransferase)	GCNT4
4.85	up	guanosine monophosphate reductase	GMPR
2.25	up	guanine nucleotide binding protein (G protein), beta polypeptide 4	GNB4
2.06	up	G protein-coupled receptor 180	GPR180
35.44	up	hect domain and RLD 5	HERC5
20.34	up	hect domain and RLD 6	HERC6

2.33	up	histone cluster 1, H4h | histone cluster 4, H4 | histone cluster 2, H4b | histone cluster 1, H4i | histone cluster 1, H4a | histone cluster 1, H4d | histone cluster 1, H4f | histone cluster 1, H4k | histone cluster 1, H4j | histone cluster 1, H4c | histone cluster 1, H4b | histone cluster 1, H4e | histone cluster 1, H4l | histone cluster 2, H4a	HIST1H4H|HIST4H4|HIST2H4B|HIST1H4I|HIST1H4A|HIST1H4D|HIST1H4F|HIST1H4K|HIST1H4J|HIST1H4C|HIST1H4B|HIST1H4E|HIST1H4L|HIST2H4A
3.92	up	histone cluster 2, H4a | histone cluster 2, H4b | histone cluster 4, H4 | histone cluster 1, H4i | histone cluster 1, H4a | histone cluster 1, H4d | histone cluster 1, H4f | histone cluster 1, H4k | histone cluster 1, H4j | histone cluster 1, H4c | histone cluster 1, H4h | histone cluster 1,	HIST2H4A|HIST2H4B|HIST4H4|HIST1H4I|HIST1H4A|HIST1H4D|HIST1H4F|HI

		H4b | histone cluster 1, H4e | histone cluster 1, H4l	ST1H4K| HIST1H4J |HIST1H4 C|HIST1H 4H|HIST1 H4B|HIST 1H4E|HIS T1H4L
3.93	up	histone cluster 2, H4a | histone cluster 2, H4b | histone cluster 4, H4 | histone cluster 1, H4i | histone cluster 1, H4a | histone cluster 1, H4d | histone cluster 1, H4f | histone cluster 1, H4k | histone cluster 1, H4j | histone cluster 1, H4c | histone cluster 1, H4h | histone cluster 1, H4b | histone cluster 1, H4e | histone cluster 1, H4l	HIST2H4 A|HIST2H 4B|HIST4 H4|HIST1 H4I|HIST1 H4A|HIST 1H4D|HIS T1H4F|HI ST1H4K| HIST1H4J |HIST1H4 C|HIST1H 4H|HIST1 H4B|HIST 1H4E|HIS T1H4L

2.00	up	major histocompatibility complex, class I, E	HLA-E
2.01	up	major histocompatibility complex, class I, E	HLA-E
2.01	up	major histocompatibility complex, class I, E	HLA-E
2.27	up	major histocompatibility complex, class I, F	HLA-F
2.30	up	major histocompatibility complex, class I, F	HLA-F
2.27	up	major histocompatibility complex, class I, F	HLA-F
8.00	up	interferon, gamma-inducible protein 16	IFI16
3.63	up	interferon, gamma-inducible protein 30 | phosphoinositide-3-kinase, regulatory subunit 2 (beta)	IFI30|PIK 3R2
9.22	up	interferon-induced protein 35	IFI35
33.22	up	interferon-induced protein 44	IFI44
35.28	up	interferon-induced protein 44-like	IFI44L
13.45	up	interferon, alpha-inducible protein 6	IFI6
35.68	up	interferon induced with helicase C	IFIH1

		domain 1	
78.79	up	interferon-induced protein with tetratricopeptide repeats 1	IFIT1
121.10	up	interferon-induced protein with tetratricopeptide repeats 2	IFIT2
40.19	up	interferon-induced protein with tetratricopeptide repeats 3	IFIT3
5.10	up	interferon-induced protein with tetratricopeptide repeats 5	IFIT5
15.75	up	interferon induced transmembrane protein 1 (9-27)	IFITM1
2.34	up	interferon induced transmembrane protein 3 (1-8U)	IFITM3
6.67	up	interferon, beta 1, fibroblast	IFNB1
5.56	up	interleukin 28A (interferon, lambda 2) | interleukin 28B (interferon, lambda 3)	IL28A|IL28B
3.00	up	interleukin 28B (interferon, lambda 3)	IL28B
4.11	up	interleukin 29 (interferon, lambda 1)	IL29
9.57	up	interleukin 6 (interferon, beta 2)	IL6
2.16	up	interleukin 8	IL8

19.87	up	indoleamine-pyrrole 2,3 dioxygenase	INDO
5.25	up	interferon regulatory factor 1	IRF1
2.68	up	interferon regulatory factor 2	IRF2
2.10	up	interferon regulatory factor 9	IRF9
4.38	up	ISG15 ubiquitin-like modifier	ISG15
2.09	up	interferon stimulated exonuclease gene 20kDa	ISG20
2.87	up	Janus kinase 2 (a protein tyrosine kinase)	JAK2
2.11	up	jun B proto-oncogene	JUNB
2.07	up	potassium channel tetramerisation domain containing 14	KCTD14
2.98	up	ring finger protein 213	KIAA1618
4.44	up	Kruppel-like factor 4 (gut)	KLF4
3.40	up	lysosomal-associated membrane protein 3	LAMP3
2.58	up	leucine aminopeptidase 3	LAP3
2.50	up	lectin, galactoside-binding, soluble, 9 (galectin 9)	LGALS9

5.12	up	lectin, galactoside-binding, soluble, 9 (galectin 9) | galectin-9 like | similar to galectin 9 short isoform	LGALS9| LOC284194|LOC654346
4.36	up	lectin, galactoside-binding, soluble, 9 (galectin 9) | similar to galectin 9 short isoform | galectin-9 like	LGALS9| LOC654346|LOC284194
3.25	up	hypothetical protein BC004921	LOC93349
2.31	up	leucine-rich repeats and calponin homology (CH) domain containing 2	LRCH2
4.95	up	leucine rich repeat neuronal 3	LRRN3
2.04	up	microtubule-associated protein 2	MAP2
2.04	up	mitogen-activated protein kinase kinase kinase 8	MAP3K8
3.10	up	microtubule associated serine/threonine kinase-like	MASTL
3.39	up	microRNA 155	MIRN155
5.12	up	mixed lineage kinase domain-like	MLKL
2.19	up	Mov10, Moloney leukemia virus 10,	MOV10

		homolog (mouse)	
48.14	up	myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse)	MX1
3.30	up	myxovirus (influenza virus) resistance 2 (mouse)	MX2
3.39	up	myeloid differentiation primary response gene (88)	MYD88
2.17	up	NEDD4 binding protein 1	N4BP1
2.57	up	neutrophil cytosolic factor 2 (65kDa, chronic granulomatous disease, autosomal 2)	NCF2
6.42	up	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	NFKBIA
2.55	up	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	NFKBIZ
2.91	up	NLR family, CARD domain containing 5	NLRC5
5.57	up	N-myc (and STAT) interactor	NMI
2.02	down	5'-nucleotidase domain containing 2	NT5DC2

2.17	up	negative regulator of ubiquitin-like proteins 1	NUB1
2.32	up	NudC domain containing 1	NUDCD1
23.02	up	2',5'-oligoadenylate synthetase 1, 40/46kDa	OAS1
18.36	up	2'-5'-oligoadenylate synthetase 2, 69/71kDa	OAS2
14.60	up	2'-5'-oligoadenylate synthetase 3, 100kDa	OAS3
27.83	up	2'-5'-oligoadenylate synthetase-like	OASL
2.03	up	opioid growth factor receptor	OGFR
3.64	up	OTU domain containing 1	OTUD1
4.96	up	poly (ADP-ribose) polymerase family, member 12	PARP12
13.77	up	poly (ADP-ribose) polymerase family, member 14	PARP14
12.13	up	poly (ADP-ribose) polymerase family, member 9	PARP9
2.31	up	protein associated with topoisomerase II homolog 1 (yeast)	PATL1
3.39	up	protocadherin 17	PCDH17

2.64	up	polycomb group ring finger 5	PCGF5
2.13	up	programmed cell death 1 ligand 2	PDCD1LG2
2.47	up	phosphodiesterase 4B, cAMP-specific (phosphodiesterase E4 dunce homolog, Drosophila)	PDE4B
2.78	up	platelet-derived growth factor receptor-like	PDGFRL
2.61	up	PDZ domain containing 2	PDZD2
3.35	up	phosphatase and actin regulator 4	PHACTR4
2.79	up	PHD finger protein 11	PHF11
2.58	up	phosphatidylinositol 4-kinase type 2 beta	PI4K2B
2.50	up	pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 4	PLEKHA4
9.26	up	phospholipid scramblase 1	PLSCR1
8.74	up	phorbol-12-myristate-13-acetate-induced protein 1	PMAIP1
2.58	up	promyelocytic leukemia	PML
4.57	up	polyribonucleotide	PNPT1

		nucleotidyltransferase 1	
4.60	up	protein phosphatase 1K (PP2C domain containing)	PPM1K
4.13	up	protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPP1R15A
3.49	up	peroxisomal proliferator-activated receptor A interacting complex 285	PRIC285
2.12	up	protein kinase D2	PRKD2
3.28	up	proteasome (prosome, macropain) subunit, beta type, 8 (large multifunctional peptidase 7)	PSMB8
3.28	up	proteasome (prosome, macropain) subunit, beta type, 8 (large multifunctional peptidase 7)	PSMB8
3.28	up	proteasome (prosome, macropain) subunit, beta type, 8 (large multifunctional peptidase 7)	PSMB8
8.15	up	proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional peptidase 2)	PSMB9
8.11	up	proteasome (prosome, macropain) subunit, beta type, 9 (large	PSMB9

		multifunctional peptidase 2)	
8.15	up	proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional peptidase 2)	PSMB9
2.10	up	proteasome (prosome, macropain) activator subunit 2 (PA28 beta)	PSME2
2.61	up	prostaglandin E receptor 4 (subtype EP4)	PTGER4
3.58	up	retinoic acid early transcript 1L	RAET1L
3.86	up	retinoic acid receptor responder (tazarotene induced) 3	RARRES3
5.95	up	RAS guanyl releasing protein 3 (calcium and DAG-regulated)	RASGRP3
2.27	up	ring finger protein 122	RNF122
2.13	up	ring finger protein 149	RNF149
2.04	up	ring finger protein 19B	RNF19B
2.98	up	ring finger protein 213	RNF213
2.43	up	ribosomal protein S6 kinase, 52kDa, polypeptide 1	RPS6KC1
68.74	up	radical S-adenosyl methionine domain containing 2	RSAD2

2.01	up	R-spondin 3 homolog (Xenopus laevis)	RSPO3
5.81	up	receptor (chemosensory) transporter protein 4	RTP4
14.07	up	sterile alpha motif domain containing 9	SAMD9
16.08	up	sterile alpha motif domain containing 9-like	SAMD9L
6.03	up	SAM domain and HD domain 1	SAMHD1
2.19	up	sodium channel and clathrin linker 1	SCLT1
2.01	up	sodium channel, voltage-gated, type III, alpha subunit	SCN3A
2.87	up	secreted and transmembrane 1	SECTM1
2.05	up	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A	SEMA3A
3.89	up	solute carrier family 15, member 3	SLC15A3
3.34	up	solute carrier family 1 (glial high affinity glutamate transporter), member 3	SLC1A3
2.35	up	solute carrier family 25, member 28	SLC25A28

2.20	up	solute carrier family 2 (facilitated glucose transporter), member 12	SLC2A12
3.39	up	schlafen family member 5	SLFN5
2.22	up	superoxide dismutase 2, mitochondrial	SOD2
3.60	up	SP100 nuclear antigen	SP100
7.75	up	Sp110 nuclear body protein	SP110
2.69	up	StAR-related lipid transfer (START) domain containing 4	STARD4
5.92	up	signal transducer and activator of transcription 1, 91kDa	STAT1
4.62	up	signal transducer and activator of transcription 2, 113kDa	STAT2
6.14	up	transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1
6.14	up	transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1
6.15	up	transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1
3.10	up	transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)	TAP2

3.02	up	transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)	TAP2
3.07	up	transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)	TAP2
4.91	up	tudor domain containing 7	TDRD7
13.49	up	toll-like receptor 3	TLR3
3.34	up	transmembrane protein 140	TMEM140
2.73	up	transmembrane protein 27	TMEM27
3.37	up	transmembrane protein 62	TMEM62
6.74	up	tumor necrosis factor, alpha-induced protein 3	TNFAIP3
3.11	up	tumor necrosis factor, alpha-induced protein 6	TNFAIP6
2.39	down	tumor necrosis factor receptor superfamily, member 10d, decoy with truncated death domain	TNFRSF10D
11.90	up	tumor necrosis factor (ligand) superfamily, member 10	TNFSF10
2.84	up	tumor necrosis factor (ligand) superfamily, member 13b	TNFSF13B
2.02	up	TNF receptor-associated factor 1	TRAF1

3.43	up	tripartite motif-containing 14	TRIM14
5.51	up	tripartite motif-containing 21	TRIM21
3.97	up	tripartite motif-containing 22	TRIM22
3.79	up	tripartite motif-containing 25	TRIM25
2.08	up	tripartite motif-containing 26	TRIM26
2.12	up	tripartite motif-containing 26	TRIM26
3.95	up	tripartite motif-containing 38	TRIM38
3.27	up	tripartite motif-containing 5	TRIM5
5.33	up	ubiquitin-like modifier activating enzyme 7	UBA7
2.69	up	ubiquitin-conjugating enzyme E2L 6	UBE2L6
2.21	up	unc-93 homolog B1 (C. elegans)	UNC93B1
12.88	up	ubiquitin specific peptidase 18	USP18
27.68	up	ubiquitin specific peptidase 18 | ubiquitin specific peptidase 41	USP18|USP41
3.74	up	tryptophanyl-tRNA synthetase	WARS
5.80	up	XIAP associated factor 1	XAF1
3.18	up	5'-3' exoribonuclease 1	XRN1
2.21	up	zinc finger CCCH-type containing 12C	ZC3H12C

5.72	up	zinc finger CCCH-type, antiviral 1	ZC3HAV1
2.18	up	zinc finger protein 107	ZNF107
2.24	up	zinc finger protein 313	ZNF313
4.64	up	zinc finger, NFX1-type containing 1	ZNFX1
2.63	up	guanylate binding protein 2, interferon-inducible	GBP2