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Interferon-α2b and ribavirin treatment improves outcome in MERS-CoV-infected rhesus macaques

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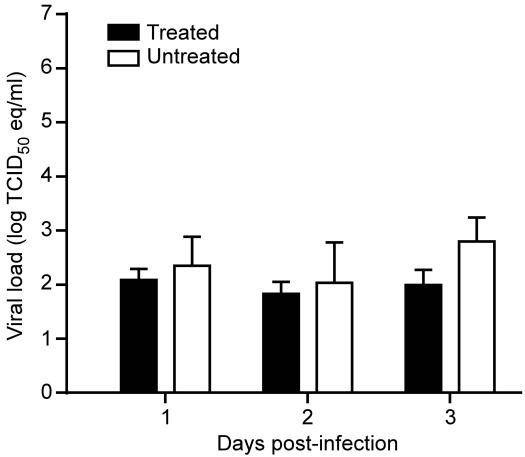

Supplemental Figure 1. Viral load (mean +/- SD) in bronchiolar alveolar lavage samples collected daily.

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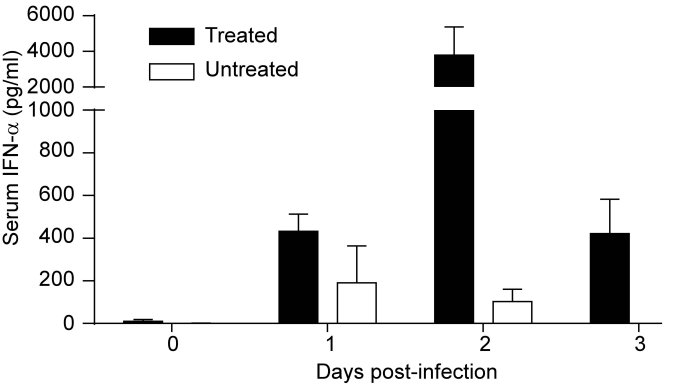

Supplemental Figure 2. Serum level (mean+/- SD) of interferon-α.

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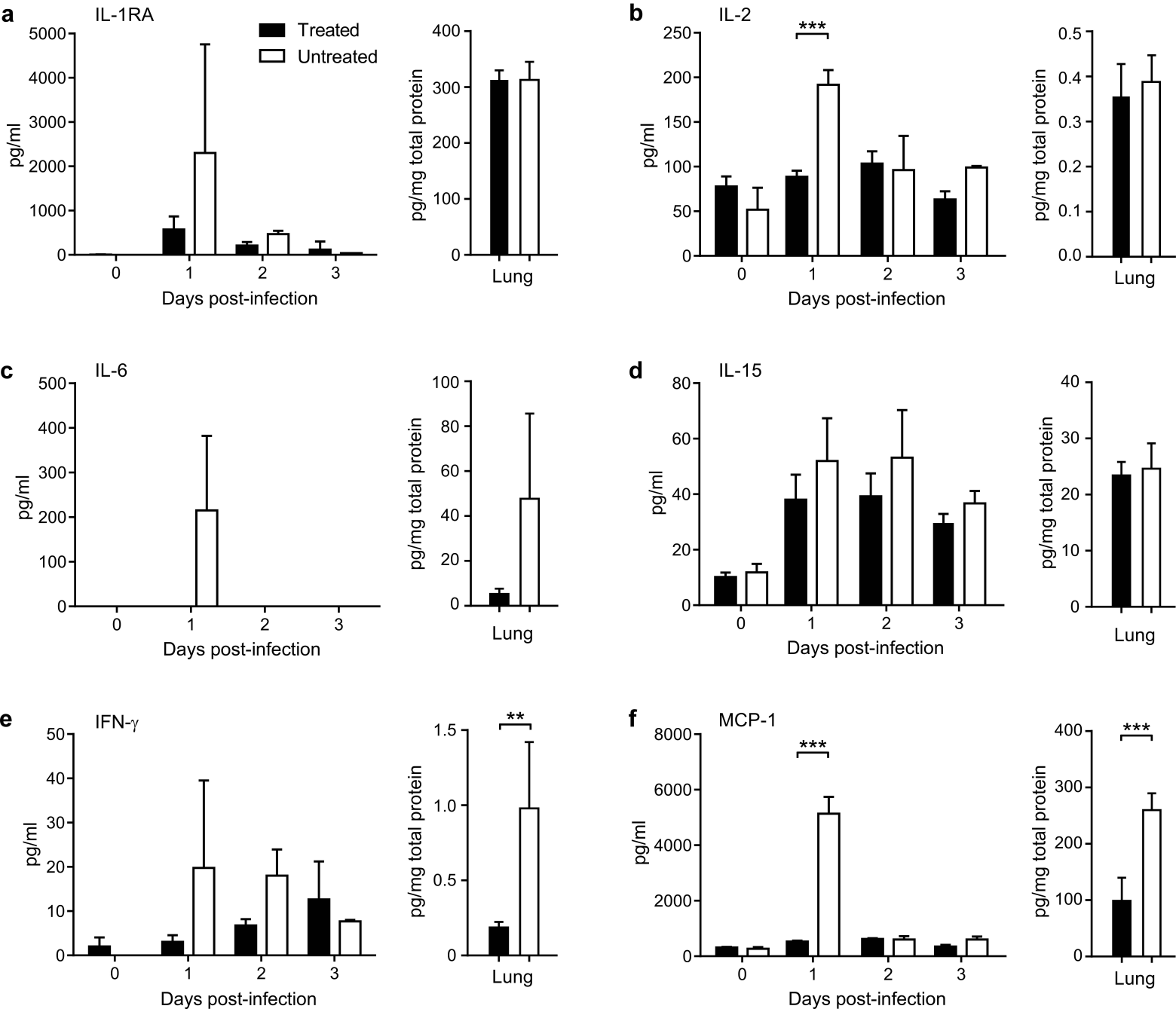

Supplemental Figure 3. Cytokines and chemokine levels in serum (mean +/- SD) and lung homogenate (mean+/- SEM). Only cytokines and chemokines that were above the limit of detection and showed alterations from baseline are shown. (serum – 2way ANOVA, Bonferroni's post-test; lung homogenate – t-test; ** $p<0.05$, ***$p<0.001$).

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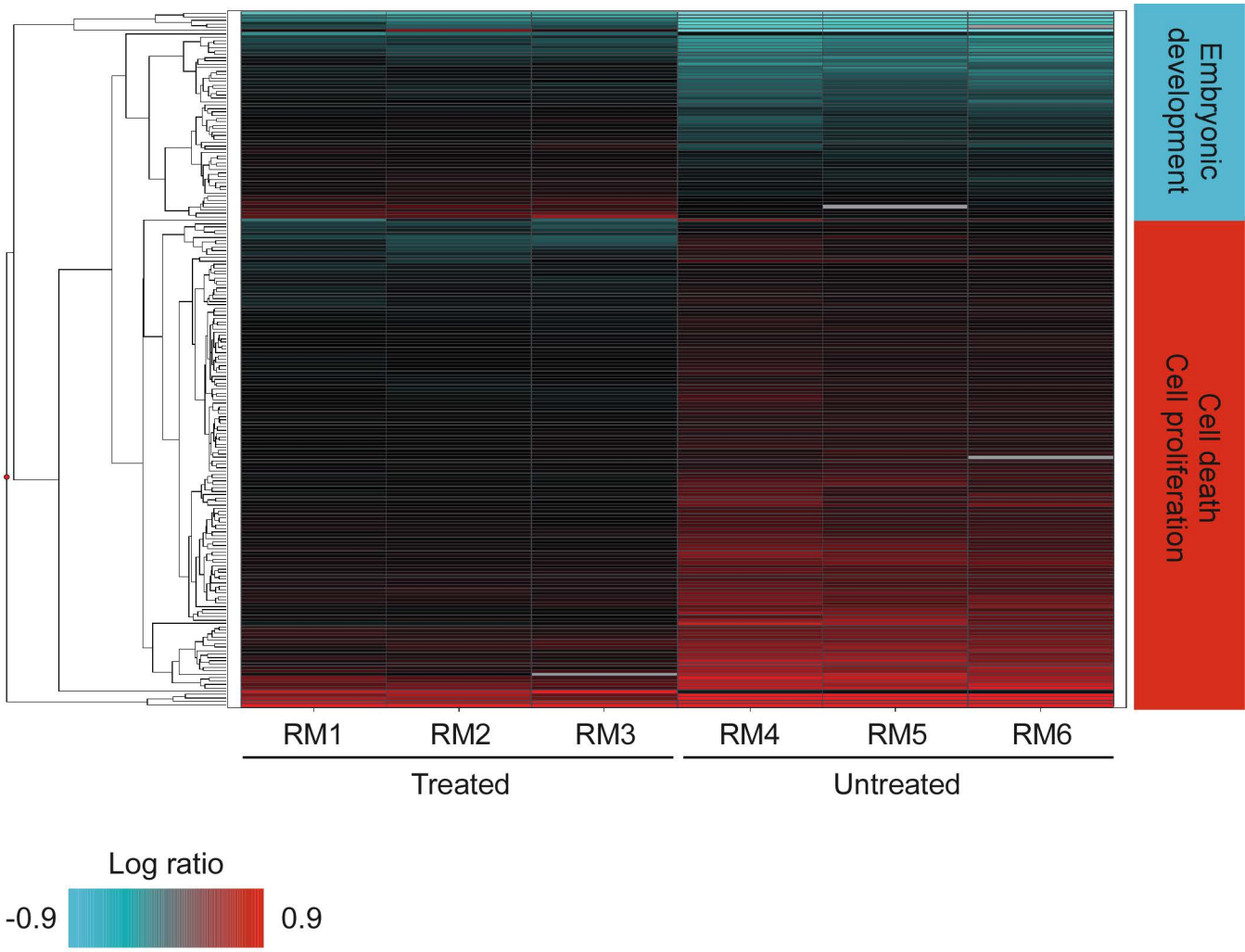

Supplemental Figure 4. Transcriptional signatures associated with combined interferon-α2b and ribavirin treatment during MERS-CoV infection in treated and untreated animals compared to two lung specimens from uninfected rhesus macaques. Heatmap shows $\log_{10}$ expression ratios to uninfected rhesus lung RNA for treated or untreated MERS-CoV-infected group means of 205 DEG, as determined by Welch's t-test ($p<0.01$, fold change = 1.5), and grouped by hierarchical clustering. Two separate clusters of up- or down-regulated DEG relative to uninfected were identified in the untreated MERS-CoV-infected group, and IPA was used to determine functional enrichment of these clusters.

Supplemental Table 1. Individual clinical parameters for rhesus macaques infected with MERS-CoV and subsequently treated with interferon-α2b and ribavirin or vehicle.

Treatment	**Treated**			**Untreated**		
Animal #	RM1	RM2	RM3	RM4	RM5	RM6
Clinical observations						
piloerection	-	-	-	+	-	+
increased respiration	-	-	-	+	+	+
abdominal breathing	-	-	-	+	+	+
decreased food intake	+	+	+	+	+	+
decreased feces	+	+	+	+	+	+
Clinical lab						
WBC	n/c[1]	n/c	n/c	increased	n/c	increased
neutrophils	n/c	n/c	n/c	increased	n/c	increased
lymphocytes	transient decrease	transient decrease	transient decrease	transient decrease	transient decrease	transient decrease
monocytes	transient decrease	transient decrease	transient decrease	transient decrease	transient decrease	transient decrease
eosinophils	n/c	n/c	n/c	n/c	n/c	n/c
basophils	n/c	n/c	n/c	n/c	n/c	n/c
SPO_2	n/c	n/c	n/c	decreased	n/c	decreased
x-ray (interstitial infiltration)	-	light	light	diffuse severe	diffuse bronchial	linear
inflammatory cytokines	-	-	-	+	+	+

[1]n/c – no change

Supplemental Table 2: Summary of radiographic findings of MERS-CoV infected rhesus macaques treated with interferon-α2b and ribavirin or untreated animals. The quality and location of interstitial infiltration observed from ventral-dorsal and lateral x-rays is indicated.

		Days post-infection			
		0	1	2	3
Treated	RM1	-[1]	-	-	-
	RM2	-	-	light (RL[2])	light (RL)
	RM3	-	-	-	light (RL)
Untreated	RM4	-	middle linear/nodular (RL, LL)	diffuse severe (RM, LM, RL, LL)	diffuse severe (RM, LM, RL, LL)
	RM5	-	light (RM, RL)	bronchial (RL)	diffuse bronchial (RM, RL, LM, LL)
	RM6	-	middle linear (RL, LL)	middle linear (RL, LL)	linear (RL, LL)

[1]normal findings; [3]lung lobes - right upper (RU), right middle (RM), right lower (RL), left upper (LU), left middle (LM), left lower (LL)

Supplemental Table 3. Pathology scores rhesus macaques infected with MERS-CoV and subsequently treated with interferon-α2b and ribavirin or vehicle.

Treatment	**Treated**			**Untreated**		
Animal #	RM1	RM2	RM3	RM4	RM5	RM6
Gross	RU/RM/RL LU/LM/LL[1]					
ventral (% affected)	0/0/0[2]	0/0/0	0/0/0	0/60/60	20/15/30	0/20/0
	0/0/0	0/0/0	0/0/0	0/30/20	0/0/0	10/30/0
dorsal (% affected)	0/0/0	0/0/0	0/0/0	10/0/10	25/5/25	0/40/0
	0/0/0	0/0/0	0/0/0	20/20/40	0/0/20	0/0/0
Histopathology						
acute bronchointerstitial pneumonia	0/0/2	2/2/2	2/2/3	3/4/3	0/4/3	2/2/3
	0/2/3	2/2/3	0/1/3	4/3/3	0/2/0	1/2/1
subacute perivasculitis	0/0/0	0/0/0	0/0/0	0/3/3	0/0/1	0/2/2
	0/0/0	0/0/0	0/0/0	2/0/3	0/0/0	1/2/1
immunohistochemistry	multifocal	multifocal	multifocal	diffuse	multifocal	multifocal

[1]Lung lobes - right upper (RU), right middle (RM), right lower (RL), left upper (LU), left middle (LM), left lower (LL). [2]Histology scoring criteria: 0 = no pathologic change. 1 = few inflammatory foci scattered between multiple lung lobes; alveolar interstitium is minimally thickened by congestion and small numbers of neutrophils and macrophages, few neutrophils and macrophages within alveoli. 2 = multiple inflammatory foci present in multiple lung lobes; alveolar interstitium is mildly thickened by congestion, edema and small numbers of neutrophils and macrophages; small numbers of neutrophils and macrophages within alveoli. 3 = multiple inflammatory foci scattered within single lung lobes; alveolar interstitium is moderately thickened by congestion, edema and moderate numbers of neutrophils and macrophages; many neutrophils and macrophages within alveoli; small amounts of fibrin and edema in alveoli. 4 = multiple to coalescing inflammatory foci within a single lung lobe; alveolar interstitium is markedly thickened by congestion, edema, fibrin and large numbers of neutrophils and macrophages; large numbers of neutrophils, macrophages, cellular debris, fibrin and edema within alveoli.

Supplemental Table 4. Annotation of the fold change of differentially expressed genes (DEG) from the right lower lung of individual animal during MERS-CoV infection in interferon-α2b and ribavirin treated and untreated animals compared to two lung specimens from uninfected rhesus macaques.

Agilent Probe Identifier	GeneName	Description	Heatmap order
A_01_P012775	NM_033258	Homo sapiens guanine nucleotide binding protein (G protein), gamma 8 (GNG8), mRNA [NM_033258]	1
A_01_P001570	NM_177444	Homo sapiens PTPRF interacting protein, binding protein 1 (liprin beta 1) (PPFIBP1), transcript variant 2, mRNA. [NM_177444]	2
A_01_P015030	NM_006925	Homo sapiens splicing factor, arginine/serine-rich 5 (SFRS5), mRNA [NM_006925]	3
A_01_P005258	A_01_P005258	Unknown	4
A_01_P015666	NM_080718	Homo sapiens T-box 5 (TBX5), transcript variant 2, mRNA [NM_080718]	5
A_01_P013420	NM_153007	Homo sapiens outer dense fiber of sperm tails 4 (ODF4), mRNA [NM_153007]	6
A_01_P016243	NM_000383	Homo sapiens autoimmune regulator (autoimmune polyendocrinopathy candidiasis ectodermal dystrophy) (AIRE), transcript variant AIRE-1, mRNA. [NM_000383]	7
A_01_P005641	NM_005269	Homo sapiens glioma-associated oncogene homolog (zinc finger protein) (GLI), mRNA [NM_005269]	8
A_01_P000976	XR_010623	PREDICTED: Macaca mulatta SET binding protein 1 (SETBP1), mRNA [XR_010623]	9
A_01_P019934	NM_198085	Homo sapiens ring finger protein 148 (RNF148), mRNA. [NM_198085]	10
A_01_P015223	NM_144490	Homo sapiens A kinase (PRKA) anchor protein 11 (AKAP11), transcript variant 2, mRNA. [NM_144490]	11
A_01_P000586	NM_006715	Homo sapiens mannosidase, alpha, class 2C, member 1 (MAN2C1), mRNA [NM_006715]	12
A_01_P014996	CN641686	ILLUMIGEN_MCQ_5182 Katze_MMBR Macaca mulatta cDNA clone IBIUW:5989 5' similar to Bases 11 to 612 highly similar to human Unigene Hs.445038, mRNA sequence [CN641686]	13
A_01_P009533	NM_020752	Homo sapiens G protein-coupled receptor 158 (GPR158), mRNA. [NM_020752]	14
A_01_P013708	NM_001008234	Homo sapiens hypothetical gene supported by BC036588 (LOC400657), mRNA.	15

		[NM_001008234]	
A_01_P009763	NM_001277	Homo sapiens choline kinase alpha (CHKA), transcript variant 1, mRNA [NM_001277]	16
A_01_P015392	NM_001004299	Homo sapiens FLJ43980 protein (FLJ43980), mRNA. [NM_001004299]	17
A_01_P008374	NM_080759	Homo sapiens dachshund homolog 1 (Drosophila) (DACH1), transcript variant 1, mRNA [NM_080759]	18
A_01_P007050	A_01_P007050	Unknown	19
A_01_P000634	A_01_P000634	Unknown	20
A_01_P016238	XR_013013	PREDICTED: Macaca mulatta similar to Zinc finger CW-type PWWP domain protein 1 homolog (LOC711911), mRNA [XR_013013]	21
A_01_P014052	XR_011148	PREDICTED: Macaca mulatta similar to CG8841-PA, isoform A (LOC699954), mRNA [XR_011148]	22
A_01_P009995	NM_017514	Homo sapiens plexin A3 (PLXNA3), mRNA [NM_017514]	23
A_01_P018522	NM_018257	Homo sapiens chromosome 20 open reading frame 36 (C20orf36), mRNA [NM_018257]	24
A_01_P001327	NM_000193	Homo sapiens sonic hedgehog homolog (Drosophila) (SHH), mRNA [NM_000193]	25
A_01_P002642	NM_182975	Homo sapiens hypothetical protein FLJ20403 (FLJ20403), transcript variant 3, mRNA [NM_182975]	26
A_01_P012281	NM_130390	Homo sapiens tripartite motif-containing 34 (TRIM34), transcript variant 3, mRNA. [NM_130390]	27
A_01_P004470	NM_017644	Homo sapiens DRE1 protein (DRE1), mRNA [NM_017644]	28
A_01_P013869	NM_183242	Homo sapiens BTB (POZ) domain containing 8 (BTBD8), mRNA [NM_183242]	29
A_01_P019891	CO725485	ILLUMIGEN_MCQ_35171 Katze_MMPL Macaca mulatta cDNA clone IBIUW:26108 5' similar to Bases 1 to 543 highly similar to human PPP1R14A (Hs.348037), mRNA sequence [CO725485]	30
A_01_P008164	CN644139	ILLUMIGEN_MCQ_9651 Katze_MMBR Macaca mulatta cDNA clone IBIUW:8946 5' similar to Bases 3 to 316 highly similar to human RAMP1 (Hs.32989), mRNA sequence [CN644139]	31
A_01_P018564	NM_017737	Homo sapiens chromosome 1 open reading frame 39 (C1orf39), mRNA [NM_017737]	32
A_01_P005675	NM_199334	Homo sapiens thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian) (THRA),	33

		transcript variant 1, mRNA [NM_199334]	
A_01_P017541	NM_018179	Homo sapiens activating transcription factor 7 interacting protein (ATF7IP), mRNA [NM_018179]	34
A_01_P014631	NM_182633	Homo sapiens hypothetical protein FLJ39963 (FLJ39963), mRNA [NM_182633]	35
A_01_P000010	NM_001298	Homo sapiens cyclic nucleotide gated channel alpha 3 (CNGA3), mRNA. [NM_001298]	36
A_01_P005762	NM_019092	Homo sapiens hypothetical protein KIAA1164 (KIAA1164), mRNA [NM_019092]	37
A_01_P012875	NM_022165	Homo sapiens lin-7 homolog B (C. elegans) (LIN7B), mRNA. [NM_022165]	38
A_01_P011760	NM_024335	Homo sapiens iroquois homeobox protein 6 (IRX6), mRNA. [NM_024335]	39
A_01_P014819	NM_024014	Homo sapiens homeo box A6 (HOXA6), mRNA. [NM_024014]	40
A_01_P000276	NM_145043	Homo sapiens nei like 2 (E. coli) (NEIL2), mRNA. [NM_145043]	41
A_01_P000450	NM_016442	Homo sapiens type 1 tumor necrosis factor receptor shedding aminopeptidase regulator (ARTS-1), mRNA [NM_016442]	42
A_01_P007931	NM_014555	Homo sapiens transient receptor potential cation channel, subfamily M, member 5 (TRPM5), mRNA. [NM_014555]	43
A_01_P019047	CO645097	ILLUMIGEN_MCQ_7508 Katze_MMBR Macaca mulatta cDNA clone IBIUW:22673 5' similar to Bases 1 to 285 highly similar to human BTEB1 (Hs.150557), mRNA sequence [CO645097]	44
A_01_P017266	NM_005468	Homo sapiens N-acetylated alpha-linked acidic dipeptidase-like 1 (NAALADL1), mRNA [NM_005468]	45
A_01_P014672	NM_145201	Homo sapiens similar to CG3714 gene product (PP3856), mRNA. [NM_145201]	46
A_01_P010687	NM_001007278	Homo sapiens ret finger protein 2 (RFP2), transcript variant 4, mRNA. [NM_001007278]	47
A_01_P010032	XR_013358	PREDICTED: Macaca mulatta similar to Calretinin (CR) (LOC708409), mRNA [XR_013358]	48
A_01_P000341	NM_003466	Homo sapiens paired box gene 8 (PAX8), transcript variant PAX8A, mRNA [NM_003466]	49
A_01_P012207	XR_012806	PREDICTED: Macaca mulatta similar to cyclic nucleotide gated channel alpha 1 (LOC704891), mRNA [XR_012806]	50
A_01_P005375	NM_030751	Homo sapiens transcription factor 8	51

		(represses interleukin 2 expression) (TCF8), mRNA [NM_030751]	
A_01_P013583	NM_173197	Homo sapiens Kv channel interacting protein 2 (KCNIP2), transcript variant 7, mRNA [NM_173197]	52
A_01_P013463	NM_013333	Homo sapiens epsin 1 (EPN1), mRNA [NM_013333]	53
A_01_P003557	NM_006550	Homo sapiens fibrinogen silencer binding protein (FSBP), mRNA [NM_006550]	54
A_01_P019269	NM_023039	Homo sapiens ankyrin repeat, family A (RFXANK-like), 2 (ANKRA2), mRNA. [NM_023039]	55
A_01_P018145	AB021124	Homo sapiens mRNA for N-acetylglucosamine 6-O-sulfotransferase, complete cds [AB021124]	56
A_01_P007500	NM_007038	Homo sapiens a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 5 (aggrecanase-2) (ADAMTS5), mRNA [NM_007038]	57
A_01_P002915	NM_016585	Homo sapiens Theg homolog (mouse) (THEG), transcript variant 1, mRNA [NM_016585]	58
A_01_P016236	NM_080662	Homo sapiens peroxisomal biogenesis factor 11 gamma (PEX11G), mRNA. [NM_080662]	59
A_01_P013045	NM_198057	Homo sapiens delta sleep inducing peptide, immunoreactor (DSIPI), transcript variant 1, mRNA [NM_198057]	60
A_01_P017300	A_01_P017300	Unknown	61
A_01_P013448	NM_052913	Homo sapiens KIAA1913 (KIAA1913), mRNA [NM_052913]	62
A_01_P017707	NM_153704	Homo sapiens hypothetical protein MGC26979 (MGC26979), mRNA [NM_153704]	63
A_01_P010205	NM_212479	Homo sapiens zinc finger, MYND domain containing 11 (ZMYND11), transcript variant 2, mRNA [NM_212479]	64
A_01_P018687	NM_005239	Homo sapiens v-ets erythroblastosis virus E26 oncogene homolog 2 (avian) (ETS2), mRNA. [NM_005239]	65
A_01_P015983	NM_001004346	Homo sapiens methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2-like (MTHFD2L), mRNA. [NM_001004346]	66
A_01_P016005	NM_006500	Homo sapiens melanoma cell adhesion molecule (MCAM), mRNA. [NM_006500]	67
A_01_P013348	NM_031452	Homo sapiens chromosome 6 open reading frame 119 (C6orf119), mRNA [NM_031452]	68
A_01_P014859	NM_031452	Homo sapiens chromosome 6 open reading	69

		frame 119 (C6orf119), mRNA [NM_031452]	
A_01_P010378	NM_153615	Homo sapiens Ral-GDS related protein Rgr (Rgr), mRNA. [NM_153615]	70
A_01_P019415	NM_001384	Homo sapiens DPH2-like 2 (S. cerevisiae) (DPH2L2), transcript variant 1, mRNA [NM_001384]	71
A_01_P007301	NM_014446	Homo sapiens integrin beta 1 binding protein 3 (ITGB1BP3), mRNA. [NM_014446]	72
A_01_P001601	NM_017662	Homo sapiens transient receptor potential cation channel, subfamily M, member 6 (TRPM6), mRNA [NM_017662]	73
A_01_P000722	NM_198321	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 10 (GalNAc-T10) (GALNT10), transcript variant 1, mRNA [NM_198321]	74
A_01_P016846	NM_014777	Homo sapiens KIAA0133 (KIAA0133), mRNA. [NM_014777]	75
A_01_P013231	NM_015531	Homo sapiens DKFZP586P0123 protein (DKFZP586P0123), mRNA. [NM_015531]	76
A_01_P002804	NM_003463	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1), mRNA. [NM_003463]	77
A_01_P005748	NM_032476	Homo sapiens mitochondrial ribosomal protein S6 (MRPS6), nuclear gene encoding mitochondrial protein, mRNA. [NM_032476]	78
A_01_P016006	NM_181671	Homo sapiens phosphatidylinositol transfer protein, cytoplasmic 1 (PITPNC1), transcript variant 2, mRNA [NM_181671]	79
A_01_P014049	NM_014503	Homo sapiens down-regulated in metastasis (DRIM), mRNA. [NM_014503]	80
A_01_P009126	NM_032704	Homo sapiens tubulin alpha 6 (TUBA6), mRNA [NM_032704]	81
A_01_P019374	NM_004219	Homo sapiens pituitary tumor-transforming 1 (PTTG1), mRNA [NM_004219]	82
A_01_P008639	XR_012838	PREDICTED: Macaca mulatta similar to activating transcription factor 7 interacting protein 2 (LOC710224), mRNA [XR_012838]	83
A_01_P016853	NM_017837	Homo sapiens phosphatidylinositol glycan, class V (PIGV), mRNA. [NM_017837]	84
A_01_P017505	XR_010563	PREDICTED: Macaca mulatta similar to Securin (Pituitary tumor-transforming protein 1) (Tumor transforming protein 1) (Esp1-associated protein) (hPTTG) (PTTG1), mRNA [XR_010563]	85
A_01_P015605	XR_011110	PREDICTED: Macaca mulatta zinc finger, DHHC domain containing 9 (ZDHHC9),	86

		mRNA [XR_011110]	
A_01_P004865	NM_018369	Homo sapiens DEP domain containing 1B (DEPDC1B), mRNA [NM_018369]	87
A_01_P015413	NM_003929	Homo sapiens RAB7, member RAS oncogene family-like 1 (RAB7L1), mRNA. [NM_003929]	88
A_01_P009025	NM_006352	Homo sapiens zinc finger protein 238 (ZNF238), transcript variant 2, mRNA [NM_006352]	89
A_01_P007655	NM_177435	Homo sapiens peroxisome proliferative activated receptor, delta (PPARD), transcript variant 2, mRNA. [NM_177435]	90
A_01_P015055	NM_005810	Homo sapiens killer cell lectin-like receptor subfamily G, member 1 (KLRG1), mRNA. [NM_005810]	91
A_01_P007235	NM_032830	Homo sapiens cirrhosis, autosomal recessive 1A (cirhin) (CIRH1A), mRNA [NM_032830]	92
A_01_P006726	NM_007355	Homo sapiens heat shock 90kDa protein 1, beta (HSPCB), mRNA [NM_007355]	93
A_01_P014085	XR_014668	PREDICTED: Macaca mulatta similar to chromatin assembly factor 1, subunit A (p150) (LOC721861), mRNA [XR_014668]	94
A_01_P019627	NM_016138	Homo sapiens coenzyme Q7 homolog, ubiquinone (yeast) (COQ7), mRNA. [NM_016138]	95
A_01_P005178	NM_022470	Homo sapiens p53 target zinc finger protein (WIG1), transcript variant 1, mRNA [NM_022470]	96
A_01_P017208	NM_022470	Homo sapiens p53 target zinc finger protein (WIG1), transcript variant 1, mRNA [NM_022470]	97
A_01_P010568	NM_005827	Homo sapiens solute carrier family 35, member B1 (SLC35B1), mRNA [NM_005827]	98
A_01_P007529	XR_013160	PREDICTED: Macaca mulatta similar to tubulin, beta polypeptide 4, member Q (LOC708952), mRNA [XR_013160]	99
A_01_P017493	XR_013160	PREDICTED: Macaca mulatta similar to tubulin, beta polypeptide 4, member Q (LOC708952), mRNA [XR_013160]	100
A_01_P006652	NM_001001132	Homo sapiens intersectin 1 (SH3 domain protein) (ITSN1), transcript variant 2, mRNA [NM_001001132]	101
A_01_P013066	NM_021204	Homo sapiens E-1 enzyme (MASA), mRNA. [NM_021204]	102
A_01_P017065	NM_014473	Homo sapiens dimethyladenosine transferase (HSA9761), mRNA. [NM_014473]	103
A_01_P017815	NM_032175	Homo sapiens hypothetical protein	104

		FLJ12787 (FLJ12787), mRNA [NM_032175]	
A_01_P010440	NM_032869	Homo sapiens NudC domain containing 1 (NUDCD1), mRNA. [NM_032869]	105
A_01_P006249	NM_016955	Homo sapiens soluble liver antigen/liver pancreas antigen (SLA/LP), mRNA [NM_016955]	106
A_01_P016495	NM_006938	Homo sapiens small nuclear ribonucleoprotein D1 polypeptide 16kDa (SNRPD1), mRNA. [NM_006938]	107
A_01_P001688	NM_001090	Homo sapiens ATP-binding cassette, sub-family F (GCN20), member 1 (ABCF1), transcript variant 2, mRNA. [NM_001090]	108
A_01_P004130	NM_024923	Homo sapiens nucleoporin 210kDa (NUP210), mRNA. [NM_024923]	109
A_01_P003118	NM_002014	Homo sapiens FK506 binding protein 4, 59kDa (FKBP4), mRNA [NM_002014]	110
A_01_P013026	NM_032656	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 37 (DHX37), mRNA. [NM_032656]	111
A_01_P001001	NM_003038	Homo sapiens solute carrier family 1 (glutamate/neutral amino acid transporter), member 4 (SLC1A4), mRNA. [NM_003038]	112
A_01_P009315	NM_015179	Homo sapiens KIAA0690 (KIAA0690), mRNA. [NM_015179]	113
A_01_P013795	NM_005348	Homo sapiens heat shock 90kDa protein 1, alpha (HSPCA), mRNA [NM_005348]	114
A_01_P004185	NM_032590	Homo sapiens F-box and leucine-rich repeat protein 10 (FBXL10), mRNA [NM_032590]	115
A_01_P006029	NM_138395	Homo sapiens methionine-tRNA synthetase 2 (mitochondrial) (MARS2), nuclear gene encoding mitochondrial protein, mRNA. [NM_138395]	116
A_01_P013636	XR_009709	PREDICTED: Macaca mulatta hypothetical protein LOC693502 (LOC693502), mRNA [XR_009709]	117
A_01_P001869	NM_012453	Homo sapiens transducin (beta)-like 2 (TBL2), transcript variant 1, mRNA. [NM_012453]	118
A_01_P015247	NM_003818	Homo sapiens CDP-diacylglycerol synthase (phosphatidate cytidylyltransferase) 2 (CDS2), mRNA [NM_003818]	119
A_01_P013342	NM_024098	Homo sapiens hypothetical protein MGC2574 (MGC2574), mRNA [NM_024098]	120
A_01_P003619	NM_015425	Homo sapiens polymerase (RNA) I polypeptide A, 194kDa (POLR1A), mRNA [NM_015425]	121
A_01_P017868	NM_006170	Homo sapiens nucleolar protein 1, 120kDa (NOL1), mRNA. [NM_006170]	122

A_01_P011637	NM_001069	Homo sapiens tubulin, beta polypeptide (TUBB), mRNA [NM_001069]	123
A_01_P013112	NM_018130	Homo sapiens SHQ1 homolog (S. cerevisiae) (SHQ1), mRNA. [NM_018130]	124
A_01_P008218	NM_003751	Homo sapiens eukaryotic translation initiation factor 3, subunit 9 eta, 116kDa (EIF3S9), transcript variant 1, mRNA [NM_003751]	125
A_01_P009978	NM_002342	Homo sapiens lymphotoxin beta receptor (TNFR superfamily, member 3) (LTBR), mRNA. [NM_002342]	126
A_01_P001694	NM_017437	Homo sapiens cleavage and polyadenylation specific factor 2, 100kDa (CPSF2), mRNA [NM_017437]	127
A_01_P006095	XR_011934	PREDICTED: Macaca mulatta DnaJ (Hsp40) homolog, subfamily A, member 3 (DNAJA3), mRNA [XR_011934]	128
A_01_P006714	NM_006638	Homo sapiens ribonuclease P 40kDa subunit (RPP40), mRNA [NM_006638]	129
A_01_P017440	NM_016936	Homo sapiens ubinuclein 1 (UBN1), mRNA. [NM_016936]	130
A_01_P019887	NM_001303	Homo sapiens COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast) (COX10), nuclear gene encoding mitochondrial protein, mRNA. [NM_001303]	131
A_01_P007128	NM_207475	Homo sapiens FLJ90680 protein (FLJ90680), mRNA. [NM_207475]	132
A_01_P009624	NM_005441	Homo sapiens chromatin assembly factor 1, subunit B (p60) (CHAF1B), mRNA [NM_005441]	133
A_01_P018559	NM_144652	Homo sapiens leucine zipper-EF-hand containing transmembrane protein 2 (LETM2), mRNA. [NM_144652]	134
A_01_P019654	NM_152342	Homo sapiens chromodomain protein, Y-like 2 (CDYL2), mRNA [NM_152342]	135
A_01_P018173	NM_001069	Homo sapiens tubulin, beta polypeptide (TUBB), mRNA [NM_001069]	136
A_01_P016934	NM_000247	Homo sapiens MHC class I polypeptide-related sequence A (MICA), mRNA. [NM_000247]	137
A_01_P018984	XR_013586	PREDICTED: Macaca mulatta similar to Protein C7orf19 (LOC715014), mRNA [XR_013586]	138
A_01_P010051	NM_033084	Homo sapiens Fanconi anemia, complementation group D2 (FANCD2), mRNA [NM_033084]	139
A_01_P011284	NM_004153	Homo sapiens origin recognition complex, subunit 1-like (yeast) (ORC1L), mRNA [NM_004153]	140

A_01_P005221	NM_025250	Homo sapiens tweety homolog 3 (Drosophila) (TTYH3), mRNA. [NM_025250]	141
A_01_P010142	NM_005444	Homo sapiens RCD1 required for cell differentiation1 homolog (S. pombe) (RQCD1), mRNA [NM_005444]	142
A_01_P019557	NM_005627	Homo sapiens serum/glucocorticoid regulated kinase (SGK), mRNA [NM_005627]	143
A_01_P007125	NM_001905	Homo sapiens CTP synthase (CTPS), mRNA. [NM_001905]	144
A_01_P006066	NM_000480	Homo sapiens adenosine monophosphate deaminase (isoform E) (AMPD3), transcript variant 1, mRNA. [NM_000480]	145
A_01_P010018	NM_144675	Homo sapiens hypothetical protein MGC18079 (MGC18079), mRNA [NM_144675]	146
A_01_P009239	NM_153702	Homo sapiens hypothetical protein MGC10084 (MGC10084), mRNA [NM_153702]	147
A_01_P013107	NM_024708	Homo sapiens ankyrin repeat and SOCS box-containing 7 (ASB7), transcript variant 1, mRNA [NM_024708]	148
A_01_P011070	NM_012111	Homo sapiens AHA1, activator of heat shock 90kDa protein ATPase homolog 1 (yeast) (AHSA1), mRNA. [NM_012111]	149
A_01_P010690	NM_012177	Homo sapiens F-box protein 5 (FBXO5), mRNA. [NM_012177]	150
A_01_P019909	NM_017813	Homo sapiens hypothetical protein FLJ20421 (FLJ20421), mRNA [NM_017813]	151
A_01_P010182	NM_000946	Homo sapiens primase, polypeptide 1, 49kDa (PRIM1), mRNA. [NM_000946]	152
A_01_P015483	NM_213636	Homo sapiens PDZ and LIM domain 7 (enigma) (PDLIM7), transcript variant 4, mRNA [NM_213636]	153
A_01_P019486	NM_024096	Homo sapiens XTP3-transactivated protein A (XTP3TPA), mRNA. [NM_024096]	154
A_01_P006705	NM_032822	Homo sapiens hypothetical protein FLJ14668 (FLJ14668), mRNA [NM_032822]	155
A_01_P001970	NM_178448	Homo sapiens chromosome 9 open reading frame 140 (C9orf140), mRNA. [NM_178448]	156
A_01_P002530	NM_024322	Homo sapiens hypothetical protein MGC11266 (MGC11266), mRNA [NM_024322]	157
A_01_P017057	NM_138806	Homo sapiens MOX2 receptor (MOX2R), transcript variant 1, mRNA [NM_138806]	158
A_01_P013116	NM_004526	Homo sapiens MCM2 minichromosome maintece deficient 2, mitotin (S. cerevisiae)	159

		(MCM2), mRNA. [NM_004526]	
A_01_P005472	NM_053282	Homo sapiens SH2 domain containing 1B (SH2D1B), mRNA. [NM_053282]	160
A_01_P001365	NM_002592	Homo sapiens proliferating cell nuclear antigen (PCNA), transcript variant 1, mRNA [NM_002592]	161
A_01_P007530	NM_194292	Homo sapiens spindle assembly abnormal protein 6 (SAS-6), mRNA. [NM_194292]	162
A_01_P007126	NM_024698	Homo sapiens solute carrier family 25 (mitochondrial carrier: glutamate), member 22 (SLC25A22), mRNA. [NM_024698]	163
A_01_P002884	CO646710	ILLUMIGEN_MCQ_39534 Katze_MMPB2 Macaca mulatta cDNA clone IBIUW:22979 5' similar to Bases 79 to 930 highly similar to human APOBEC3F (Hs.337667), mRNA sequence [CO646710]	164
A_01_P014003	NM_031485	Homo sapiens glutamate-rich WD repeat containing 1 (GRWD1), mRNA. [NM_031485]	165
A_01_P012523	NM_052821	Homo sapiens WD repeat domain 5 (WDR5), transcript variant 2, mRNA [NM_052821]	166
A_01_P006973	NM_018438	Homo sapiens F-box only protein 6 (FBXO6), mRNA [NM_018438]	167
A_01_P001806	NM_003587	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 16 (DHX16), mRNA [NM_003587]	168
A_01_P001968	NM_018132	Homo sapiens chromosome 6 open reading frame 139 (C6orf139), mRNA. [NM_018132]	169
A_01_P001434	NM_000097	Homo sapiens coproporphyrinogen oxidase (CPOX), mRNA [NM_000097]	170
A_01_P013620	NM_001005339	Homo sapiens regulator of G-protein signalling 10 (RGS10), transcript variant 1, mRNA [NM_001005339]	171
A_01_P011046	NM_032048	Homo sapiens elastin microfibril interfacer 2 (EMILIN2), mRNA [NM_032048]	172
A_01_P017254	NM_024309	Homo sapiens TNFAIP3 interacting protein 2 (TNIP2), mRNA. [NM_024309]	173
A_01_P016200	NM_198282	Homo sapiens hypothetical protein LOC340061 (LOC340061), mRNA. [NM_198282]	174
A_01_P009963	NM_032331	Homo sapiens hypothetical protein MGC2408 (MGC2408), mRNA [NM_032331]	175
A_01_P010129	NM_025217	Homo sapiens UL16 binding protein 2 (ULBP2), mRNA. [NM_025217]	176
A_01_P013921	NM_005914	Homo sapiens MCM4 minichromosome maintece deficient 4 (S. cerevisiae) (MCM4), transcript variant 1, mRNA.	177

		[NM_005914]	
A_01_P004381	NM_006142	Homo sapiens stratifin (SFN), mRNA. [NM_006142]	178
A_01_P015440	NM_203311	Homo sapiens similar to Taxol resistant associated protein 3 (TRAG-3) (LOC389903), mRNA [NM_203311]	179
A_01_P015824	NM_018204	Homo sapiens cytoskeleton associated protein 2 (CKAP2), mRNA. [NM_018204]	180
A_01_P009604	XR_012476	PREDICTED: Macaca mulatta hypothetical protein LOC711693 (LOC711693), mRNA [XR_012476]	181
A_01_P014786	NM_198563	Homo sapiens Similar to RIKEN cDNA 1810038N08 gene (MGC52022), mRNA. [NM_198563]	182
A_01_P000998	NM_016489	Homo sapiens 5'-nucleotidase, cytosolic III (NT5C3), transcript variant 3, mRNA. [NM_016489]	183
A_01_P006006	NM_013334	Homo sapiens GDP-mannose pyrophosphorylase B (GMPPB), transcript variant 1, mRNA [NM_013334]	184
A_01_P019058	NM_002406	Homo sapiens mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase (MGAT1), mRNA. [NM_002406]	185
A_01_P000686	NM_002250	Homo sapiens potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4 (KCNN4), mRNA. [NM_002250]	186
A_01_P002633	NM_003594	Homo sapiens transcription termination factor, RNA polymerase II (TTF2), mRNA. [NM_003594]	187
A_01_P009125	XR_010550	PREDICTED: Macaca mulatta WD repeat and HMG-box DNA binding protein 1 (WDHD1), mRNA [XR_010550]	188
A_01_P006184	NM_002445	Homo sapiens macrophage scavenger receptor 1 (MSR1), transcript variant SR-AII, mRNA. [NM_002445]	189
A_01_P016583	NM_003920	Homo sapiens timeless homolog (Drosophila) (TIMELESS), mRNA [NM_003920]	190
A_01_P001297	NM_005461	Homo sapiens v-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian) (MAFB), mRNA [NM_005461]	191
A_01_P016718	NM_004111	Homo sapiens flap structure-specific endonuclease 1 (FEN1), mRNA [NM_004111]	192
A_01_P015686	NM_080626	Homo sapiens BRI3 binding protein (BRI3BP), mRNA [NM_080626]	193
A_01_P012645	NM_021129	Homo sapiens pyrophosphatase (inorganic) (PP), mRNA [NM_021129]	194

A_01_P015552	NM_023930	Homo sapiens potassium channel tetramerisation domain containing 14 (KCTD14), mRNA [NM_023930]	195
A_01_P010380	NM_024680	Homo sapiens E2F transcription factor 8 (E2F8), mRNA. [NM_024680]	196
A_01_P009465	NM_017654	Homo sapiens sterile alpha motif domain containing 9 (SAMD9), mRNA. [NM_017654]	197
A_01_P000668	XR_012726	PREDICTED: Macaca mulatta similar to ubiquitin-conjugating enzyme E2L 6 isoform 1 (LOC705561), mRNA [XR_012726]	198
A_01_P014951	NM_032148	Homo sapiens solute carrier family 41, member 2 (SLC41A2), mRNA [NM_032148]	199
A_01_P004909	NM_006678	Homo sapiens CD300C antigen (CD300C), mRNA. [NM_006678]	200
A_01_P013244	NM_001085	Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3 (SERPINA3), mRNA. [NM_001085]	201
A_01_P002897	NM_032782	Homo sapiens hepatitis A virus cellular receptor 2 (HAVCR2), mRNA. [NM_032782]	202
A_01_P010844	NM_172140	Homo sapiens interleukin 29 (interferon, lambda 1) (IL29), mRNA. [NM_172140]	203
A_01_P003147	NM_016816	Homo sapiens 2',5'-oligoadenylate synthetase 1, 40/46kDa (OAS1), transcript variant E18, mRNA. [NM_016816]	204
A_01_P008276	NM_003733	Homo sapiens 2'-5'-oligoadenylate synthetase-like (OASL), transcript variant 1, mRNA. [NM_003733]	205

Supplemental Table 5. Annotation of the fold change of 205 differentially expressed genes (DEG) from the right lower lung of individual animals during MERS-CoV infection in interferon-α2b and ribavirin treated and untreated animals as determined by Welch's t-test ($p<0.01$, fold change ≥ 1.5), and grouped by hierarchical clustering.

Agilent Probe Identifier	Accession Number (RefSeq)	Description	Average Treated	Average Untreated	Heatmap order
A_01_P013448	NM_052913	Homo sapiens KIAA1913 (KIAA1913), mRNA [NM_052913]	-0.7066	-0.0133	1
A_01_P009604	XR_012476	PREDICTED: Macaca mulatta hypothetical protein LOC711693 (LOC711693), mRNA [XR_012476]	-0.6796	-0.0128	2
A_01_P010380	NM_024680	Homo sapiens E2F transcription factor 8 (E2F8), mRNA. [NM_024680]	-0.6145	-0.0072	3
A_01_P016005	NM_006500	Homo sapiens melanoma cell adhesion molecule (MCAM), mRNA. [NM_006500]	-0.5394	-0.0048	4
A_01_P004381	NM_006142	Homo sapiens stratifin (SFN), mRNA. [NM_006142]	-0.4943	-0.0035	5
A_01_P010844	NM_172140	Homo sapiens interleukin 29 (interferon, lambda 1) (IL29), mRNA. [NM_172140]	-0.5134	-0.0133	6
A_01_P015824	NM_018204	Homo sapiens cytoskeleton associated protein 2 (CKAP2), mRNA. [NM_018204]	-0.4927	-0.0108	7
A_01_P014859	NM_031452	Homo sapiens chromosome 6 open reading frame 119 (C6orf119), mRNA [NM_031452]	-0.4332	-0.0035	8
A_01_P013348	NM_031452	Homo sapiens chromosome 6 open reading frame 119 (C6orf119), mRNA [NM_031452]	-0.4074	-0.0051	9
A_01_P013921	NM_005914	Homo sapiens MCM4 minichromosome maintece deficient 4 (S. cerevisiae) (MCM4), transcript variant 1, mRNA. [NM_005914]	-0.4114	-0.0033	10
A_01_P006184	NM_002445	Homo sapiens macrophage scavenger receptor 1 (MSR1), transcript variant SR-AII, mRNA. [NM_002445]	-0.4172	-0.0012	11
A_01_P016718	NM_004111	Homo sapiens flap structure-specific endonuclease 1 (FEN1), mRNA [NM_004111]	-0.4043	-0.0068	12
A_01_P015686	NM_080626	Homo sapiens BRI3 binding protein (BRI3BP), mRNA [NM_080626]	-0.3991	-0.0044	13
A_01_P010018	NM_144675	Homo sapiens hypothetical protein MGC18079 (MGC18079), mRNA [NM_144675]	-0.4207	-0.0034	14

A_01_P011284	NM_004153	Homo sapiens origin recognition complex, subunit 1-like (yeast) (ORC1L), mRNA [NM_004153]	-0.4111	-0.0036	15
A_01_P019557	NM_005627	Homo sapiens serum/glucocorticoid regulated kinase (SGK), mRNA [NM_005627]	-0.3832	-0.0061	16
A_01_P002897	NM_032782	Homo sapiens hepatitis A virus cellular receptor 2 (HAVCR2), mRNA. [NM_032782]	-0.4007	-0.0066	17
A_01_P000722	NM_198321	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 10 (GalNAc-T10) (GALNT10), transcript variant 1, mRNA [NM_198321]	-0.3898	-0.0048	18
A_01_P010378	NM_153615	Homo sapiens Ral-GDS related protein Rgr (Rgr), mRNA. [NM_153615]	-0.3821	-0.0081	19
A_01_P001601	NM_017662	Homo sapiens transient receptor potential cation channel, subfamily M, member 6 (TRPM6), mRNA [NM_017662]	-0.3662	-0.0024	20
A_01_P019415	NM_001384	Homo sapiens DPH2-like 2 (S. cerevisiae) (DPH2L2), transcript variant 1, mRNA [NM_001384]	-0.3471	-0.0019	21
A_01_P007530	NM_194292	Homo sapiens spindle assembly abnormal protein 6 (SAS-6), mRNA. [NM_194292]	-0.3254	-0.0011	22
A_01_P012645	NM_021129	Homo sapiens pyrophosphatase (inorganic) (PP), mRNA [NM_021129]	-0.3882	-0.0029	23
A_01_P015440	NM_203311	Homo sapiens similar to Taxol resistant associated protein 3 (TRAG-3) (LOC389903), mRNA [NM_203311]	-0.3659	-0.0036	24
A_01_P001297	NM_005461	Homo sapiens v-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian) (MAFB), mRNA [NM_005461]	-0.3656	-0.0021	25
A_01_P018984	XR_013586	PREDICTED: Macaca mulatta similar to Protein C7orf19 (LOC715014), mRNA [XR_013586]	-0.3871	-0.0011	26
A_01_P008276	NM_003733	Homo sapiens 2'-5'-oligoadenylate synthetase-like (OASL), transcript variant 1, mRNA. [NM_003733]	-0.3789	-0.0019	27
A_01_P007125	NM_001905	Homo sapiens CTP synthase (CTPS), mRNA. [NM_001905]	-0.3537	-0.0047	28
A_01_P016934	NM_000247	Homo sapiens MHC class I polypeptide-related sequence A (MICA), mRNA. [NM_000247]	-0.3564	-0.0002	29
A_01_P010051	NM_033084	Homo sapiens Fanconi anemia, complementation group D2 (FANCD2), mRNA [NM_033084]	-0.3429	-0.0029	30
A_01_P016583	NM_003920	Homo sapiens timeless homolog (Drosophila) (TIMELESS), mRNA	-0.3622	-0.0025	31

		[NM_003920]			
A_01_P004909	NM_006678	Homo sapiens CD300C antigen (CD300C), mRNA. [NM_006678]	-0.3483	-0.0020	32
A_01_P010205	NM_212479	Homo sapiens zinc finger, MYND domain containing 11 (ZMYND11), transcript variant 2, mRNA [NM_212479]	-0.3313	-0.0023	33
A_01_P006066	NM_000480	Homo sapiens adenosine monophosphate deaminase (isoform E) (AMPD3), transcript variant 1, mRNA. [NM_000480]	-0.3297	-0.0055	34
A_01_P004185	NM_032590	Homo sapiens F-box and leucine-rich repeat protein 10 (FBXL10), mRNA [NM_032590]	-0.3190	-0.0035	35
A_01_P013795	NM_005348	Homo sapiens heat shock 90kDa protein 1, alpha (HSPCA), mRNA [NM_005348]	-0.3018	-0.0039	36
A_01_P009465	NM_017654	Homo sapiens sterile alpha motif domain containing 9 (SAMD9), mRNA. [NM_017654]	-0.3300	-0.0034	37
A_01_P013116	NM_004526	Homo sapiens MCM2 minichromosome maintece deficient 2, mitotin (S. cerevisiae) (MCM2), mRNA. [NM_004526]	-0.2967	-0.0039	38
A_01_P001001	NM_003038	Homo sapiens solute carrier family 1 (glutamate/neutral amino acid transporter), member 4 (SLC1A4), mRNA. [NM_003038]	-0.2995	-0.0016	39
A_01_P010129	NM_025217	Homo sapiens UL16 binding protein 2 (ULBP2), mRNA. [NM_025217]	-0.3377	-0.0050	40
A_01_P005472	NM_053282	Homo sapiens SH2 domain containing 1B (SH2D1B), mRNA. [NM_053282]	-0.3256	-0.0059	41
A_01_P007126	NM_024698	Homo sapiens solute carrier family 25 (mitochondrial carrier: glutamate), member 22 (SLC25A22), mRNA. [NM_024698]	-0.3198	-0.0004	42
A_01_P001970	NM_178448	Homo sapiens chromosome 9 open reading frame 140 (C9orf140), mRNA. [NM_178448]	-0.3005	-0.0011	43
A_01_P015552	NM_023930	Homo sapiens potassium channel tetramerisation domain containing 14 (KCTD14), mRNA [NM_023930]	-0.2808	-0.0018	44
A_01_P017057	NM_138806	Homo sapiens MOX2 receptor (MOX2R), transcript variant 1, mRNA [NM_138806]	-0.3154	-0.0019	45
A_01_P015605	XR_011110	PREDICTED: Macaca mulatta zinc finger, DHHC domain containing 9 (ZDHHC9), mRNA [XR_011110]	-0.3080	-0.0043	46
A_01_P001365	NM_002592	Homo sapiens proliferating cell nuclear antigen (PCNA), transcript variant 1,	-0.3034	-0.0043	47

		mRNA [NM_002592]			
A_01_P007301	NM_014446	Homo sapiens integrin beta 1 binding protein 3 (ITGB1BP3), mRNA. [NM_014446]	-0.3027	-0.0048	48
A_01_P010142	NM_005444	Homo sapiens RCD1 required for cell differentiation1 homolog (S. pombe) (RQCD1), mRNA [NM_005444]	-0.2984	-0.0049	49
A_01_P016243	NM_000383	Homo sapiens autoimmune regulator (autoimmune polyendocrinopathy candidiasis ectodermal dystrophy) (AIRE), transcript variant AIRE-1, mRNA. [NM_000383]	-0.2975	-0.0036	50
A_01_P004865	NM_018369	Homo sapiens DEP domain containing 1B (DEPDC1B), mRNA [NM_018369]	-0.2948	-0.0016	51
A_01_P002530	NM_024322	Homo sapiens hypothetical protein MGC11266 (MGC11266), mRNA [NM_024322]	-0.2780	-0.0027	52
A_01_P005221	NM_025250	Homo sapiens tweety homolog 3 (Drosophila) (TTYH3), mRNA. [NM_025250]	-0.2821	-0.0037	53
A_01_P009624	NM_005441	Homo sapiens chromatin assembly factor 1, subunit B (p60) (CHAF1B), mRNA [NM_005441]	-0.2715	-0.0025	54
A_01_P015055	NM_005810	Homo sapiens killer cell lectin-like receptor subfamily G, member 1 (KLRG1), mRNA. [NM_005810]	-0.2677	-0.0017	55
A_01_P009315	NM_015179	Homo sapiens KIAA0690 (KIAA0690), mRNA. [NM_015179]	-0.2713	-0.0029	56
A_01_P014951	NM_032148	Homo sapiens solute carrier family 41, member 2 (SLC41A2), mRNA [NM_032148]	-0.2575	-0.0035	57
A_01_P008639	XR_012838	PREDICTED: Macaca mulatta similar to activating transcription factor 7 interacting protein 2 (LOC710224), mRNA [XR_012838]	-0.2566	-0.0004	58
A_01_P019374	NM_004219	Homo sapiens pituitary tumor-transforming 1 (PTTG1), mRNA [NM_004219]	-0.2389	-0.0019	59
A_01_P017254	NM_024309	Homo sapiens TNFAIP3 interacting protein 2 (TNIP2), mRNA. [NM_024309]	-0.2639	-0.0022	60
A_01_P018173	NM_001069	Homo sapiens tubulin, beta polypeptide (TUBB), mRNA [NM_001069]	-0.2620	-0.0001	61
A_01_P013112	NM_018130	Homo sapiens SHQ1 homolog (S. cerevisiae) (SHQ1), mRNA. [NM_018130]	-0.2611	0.0000	62
A_01_P016495	NM_006938	Homo sapiens small nuclear ribonucleoprotein D1 polypeptide 16kDa (SNRPD1), mRNA. [NM_006938]	-0.2524	-0.0028	63
A_01_P009963	NM_032331	Homo sapiens hypothetical protein	-0.2534	-0.0036	64

		MGC2408 (MGC2408), mRNA [NM_032331]			
A_01_P009125	XR_010550	PREDICTED: Macaca mulatta WD repeat and HMG-box DNA binding protein 1 (WDHD1), mRNA [XR_010550]	-0.2666	-0.0019	65
A_01_P006705	NM_032822	Homo sapiens hypothetical protein FLJ14668 (FLJ14668), mRNA [NM_032822]	-0.2579	-0.0016	66
A_01_P017505	XR_010563	PREDICTED: Macaca mulatta similar to Securin (Pituitary tumor-transforming protein 1) (Tumor transforming protein 1) (Esp1-associated protein) (hPTTG) (PTTG1), mRNA [XR_010563]	-0.2500	-0.0012	67
A_01_P002633	NM_003594	Homo sapiens transcription termination factor, RNA polymerase II (TTF2), mRNA. [NM_003594]	-0.2377	-0.0020	68
A_01_P010440	NM_032869	Homo sapiens NudC domain containing 1 (NUDCD1), mRNA. [NM_032869]	-0.2356	-0.0013	69
A_01_P002804	NM_003463	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1), mRNA. [NM_003463]	-0.2320	-0.0001	70
A_01_P011637	NM_001069	Homo sapiens tubulin, beta polypeptide (TUBB), mRNA [NM_001069]	-0.2406	0.0000	71
A_01_P019058	NM_002406	Homo sapiens mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase (MGAT1), mRNA. [NM_002406]	-0.2261	-0.0005	72
A_01_P014003	NM_031485	Homo sapiens glutamate-rich WD repeat containing 1 (GRWD1), mRNA. [NM_031485]	-0.2298	-0.0016	73
A_01_P016853	NM_017837	Homo sapiens phosphatidylinositol glycan, class V (PIGV), mRNA. [NM_017837]	-0.2204	-0.0022	74
A_01_P006973	NM_018438	Homo sapiens F-box only protein 6 (FBXO6), mRNA [NM_018438]	-0.2120	-0.0003	75
A_01_P009978	NM_002342	Homo sapiens lymphotoxin beta receptor (TNFR superfamily, member 3) (LTBR), mRNA. [NM_002342]	-0.2102	0.0000	76
A_01_P013231	NM_015531	Homo sapiens DKFZP586P0123 protein (DKFZP586P0123), mRNA. [NM_015531]	-0.2139	-0.0023	77
A_01_P003619	NM_015425	Homo sapiens polymerase (RNA) I polypeptide A, 194kDa (POLR1A), mRNA [NM_015425]	-0.2179	-0.0002	78
A_01_P012523	NM_052821	Homo sapiens WD repeat domain 5 (WDR5), transcript variant 2, mRNA [NM_052821]	-0.2097	-0.0010	79
A_01_P013342	NM_024098	Homo sapiens hypothetical protein MGC2574 (MGC2574), mRNA [NM_024098]	-0.2090	-0.0006	80

A_01_P016846	NM_014777	Homo sapiens KIAA0133 (KIAA0133), mRNA. [NM_014777]	-0.2126	-0.0006	81
A_01_P019486	NM_024096	Homo sapiens XTP3-transactivated protein A (XTP3TPA), mRNA. [NM_024096]	-0.2053	-0.0006	82
A_01_P006714	NM_006638	Homo sapiens ribonuclease P 40kDa subunit (RPP40), mRNA [NM_006638]	-0.1999	-0.0011	83
A_01_P017065	NM_014473	Homo sapiens dimethyladenosine transferase (HSA9761), mRNA. [NM_014473]	-0.1900	-0.0013	84
A_01_P001694	NM_017437	Homo sapiens cleavage and polyadenylation specific factor 2, 100kDa (CPSF2), mRNA [NM_017437]	-0.1940	-0.0004	85
A_01_P017815	NM_032175	Homo sapiens hypothetical protein FLJ12787 (FLJ12787), mRNA [NM_032175]	-0.1912	-0.0015	86
A_01_P008218	NM_003751	Homo sapiens eukaryotic translation initiation factor 3, subunit 9 eta, 116kDa (EIF3S9), transcript variant 1, mRNA [NM_003751]	-0.1829	-0.0002	87
A_01_P006095	XR_011934	PREDICTED: Macaca mulatta DnaJ (Hsp40) homolog, subfamily A, member 3 (DNAJA3), mRNA [XR_011934]	-0.1822	-0.0018	88
A_01_P017868	NM_006170	Homo sapiens nucleolar protein 1, 120kDa (NOL1), mRNA. [NM_006170]	-0.1908	-0.0005	89
A_01_P001806	NM_003587	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 16 (DHX16), mRNA [NM_003587]	-0.1817	-0.0004	90
A_01_P003118	NM_002014	Homo sapiens FK506 binding protein 4, 59kDa (FKBP4), mRNA [NM_002014]	-0.2219	-0.0009	91
A_01_P017440	NM_016936	Homo sapiens ubinuclein 1 (UBN1), mRNA. [NM_016936]	-0.2212	-0.0020	92
A_01_P019887	NM_001303	Homo sapiens COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast) (COX10), nuclear gene encoding mitochondrial protein, mRNA. [NM_001303]	-0.2123	-0.0004	93
A_01_P001688	NM_001090	Homo sapiens ATP-binding cassette, sub-family F (GCN20), member 1 (ABCF1), transcript variant 2, mRNA. [NM_001090]	-0.2032	-0.0016	94
A_01_P005748	NM_032476	Homo sapiens mitochondrial ribosomal protein S6 (MRPS6), nuclear gene encoding mitochondrial protein, mRNA. [NM_032476]	-0.1945	-0.0020	95
A_01_P000686	NM_002250	Homo sapiens potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4 (KCNN4), mRNA. [NM_002250]	-0.1901	-0.0008	96

A_01_P000668	XR_012726	PREDICTED: Macaca mulatta similar to ubiquitin-conjugating enzyme E2L 6 isoform 1 (LOC705561), mRNA [XR_012726]	-0.2633	-0.0007	97
A_01_P006029	NM_138395	Homo sapiens methionine-tRNA synthetase 2 (mitochondrial) (MARS2), nuclear gene encoding mitochondrial protein, mRNA. [NM_138395]	-0.2578	-0.0015	98
A_01_P016200	NM_198282	Homo sapiens hypothetical protein LOC340061 (LOC340061), mRNA. [NM_198282]	-0.2479	-0.0010	99
A_01_P013107	NM_024708	Homo sapiens ankyrin repeat and SOCS box-containing 7 (ASB7), transcript variant 1, mRNA [NM_024708]	-0.2453	-0.0002	100
A_01_P006006	NM_013334	Homo sapiens GDP-mannose pyrophosphorylase B (GMPPB), transcript variant 1, mRNA [NM_013334]	-0.2327	-0.0010	101
A_01_P003147	NM_016816	Homo sapiens 2',5'-oligoadenylate synthetase 1, 40/46kDa (OAS1), transcript variant E18, mRNA. [NM_016816]	-0.2534	-0.0019	102
A_01_P007655	NM_177435	Homo sapiens peroxisome proliferative activated receptor, delta (PPARD), transcript variant 2, mRNA. [NM_177435]	-0.2280	-0.0014	103
A_01_P013026	NM_032656	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 37 (DHX37), mRNA. [NM_032656]	-0.2308	-0.0014	104
A_01_P004130	NM_024923	Homo sapiens nucleoporin 210kDa (NUP210), mRNA. [NM_024923]	-0.2214	-0.0018	105
A_01_P006249	NM_016955	Homo sapiens soluble liver antigen/liver pancreas antigen (SLA/LP), mRNA [NM_016955]	-0.2342	-0.0015	106
A_01_P018687	NM_005239	Homo sapiens v-ets erythroblastosis virus E26 oncogene homolog 2 (avian) (ETS2), mRNA. [NM_005239]	-0.2283	-0.0005	107
A_01_P019627	NM_016138	Homo sapiens coenzyme Q7 homolog, ubiquinone (yeast) (COQ7), mRNA. [NM_016138]	-0.2152	-0.0009	108
A_01_P010690	NM_012177	Homo sapiens F-box protein 5 (FBXO5), mRNA. [NM_012177]	-0.2354	-0.0012	109
A_01_P011046	NM_032048	Homo sapiens elastin microfibril interfacer 2 (EMILIN2), mRNA [NM_032048]	-0.2215	-0.0027	110
A_01_P001869	NM_012453	Homo sapiens transducin (beta)-like 2 (TBL2), transcript variant 1, mRNA. [NM_012453]	-0.2192	-0.0007	111
A_01_P013636	XR_009709	PREDICTED: Macaca mulatta hypothetical protein LOC693502 (LOC693502), mRNA [XR_009709]	-0.2169	-0.0006	112

A_01_P007529	XR_013160	PREDICTED: Macaca mulatta similar to tubulin, beta polypeptide 4, member Q (LOC708952), mRNA [XR_013160]	-0.2131	-0.0001	113
A_01_P009025	NM_006352	Homo sapiens zinc finger protein 238 (ZNF238), transcript variant 2, mRNA [NM_006352]	-0.2155	-0.0006	114
A_01_P017493	XR_013160	PREDICTED: Macaca mulatta similar to tubulin, beta polypeptide 4, member Q (LOC708952), mRNA [XR_013160]	-0.2106	-0.0001	115
A_01_P014085	XR_014668	PREDICTED: Macaca mulatta similar to chromatin assembly factor 1, subunit A (p150) (LOC721861), mRNA [XR_014668]	-0.2353	-0.0024	116
A_01_P007235	NM_032830	Homo sapiens cirrhosis, autosomal recessive 1A (cirhin) (CIRH1A), mRNA [NM_032830]	-0.2274	-0.0025	117
A_01_P014049	NM_014503	Homo sapiens down-regulated in metastasis (DRIM), mRNA. [NM_014503]	-0.2205	-0.0003	118
A_01_P002884	CO646710	ILLUMIGEN_MCQ_39534 Katze_MMPB2 Macaca mulatta cDNA clone IBIUW:22979 5' similar to Bases 79 to 930 highly similar to human APOBEC3F (Hs.337667), mRNA sequence [CO646710]	-0.2197	-0.0004	119
A_01_P014786	NM_198563	Homo sapiens Similar to RIKEN cDNA 1810038N08 gene (MGC52022), mRNA. [NM_198563]	-0.2149	-0.0005	120
A_01_P000998	NM_016489	Homo sapiens 5'-nucleotidase, cytosolic III (NT5C3), transcript variant 3, mRNA. [NM_016489]	-0.2114	-0.0004	121
A_01_P019909	NM_017813	Homo sapiens hypothetical protein FLJ20421 (FLJ20421), mRNA [NM_017813]	-0.2141	-0.0004	122
A_01_P005178	NM_022470	Homo sapiens p53 target zinc finger protein (WIG1), transcript variant 1, mRNA [NM_022470]	-0.2078	-0.0002	123
A_01_P017208	NM_022470	Homo sapiens p53 target zinc finger protein (WIG1), transcript variant 1, mRNA [NM_022470]	-0.2026	-0.0001	124
A_01_P015413	NM_003929	Homo sapiens RAB7, member RAS oncogene family-like 1 (RAB7L1), mRNA. [NM_003929]	-0.2032	-0.0013	125
A_01_P006652	NM_001001132	Homo sapiens intersectin 1 (SH3 domain protein) (ITSN1), transcript variant 2, mRNA [NM_001001132]	-0.2014	-0.0007	126
A_01_P006726	NM_007355	Homo sapiens heat shock 90kDa protein 1, beta (HSPCB), mRNA [NM_007355]	-0.2000	-0.0014	127
A_01_P015483	NM_213636	Homo sapiens PDZ and LIM domain 7 (enigma) (PDLIM7), transcript variant 4, mRNA [NM_213636]	-0.1912	-0.0015	128

A_01_P001434	NM_000097	Homo sapiens coproporphyrinogen oxidase (CPOX), mRNA [NM_000097]	-0.1973	-0.0016	129
A_01_P018559	NM_144652	Homo sapiens leucine zipper-EF-hand containing transmembrane protein 2 (LETM2), mRNA. [NM_144652]	-0.1936	-0.0003	130
A_01_P013620	NM_001005339	Homo sapiens regulator of G-protein signalling 10 (RGS10), transcript variant 1, mRNA [NM_001005339]	-0.1921	-0.0016	131
A_01_P019654	NM_152342	Homo sapiens chromodomain protein, Y-like 2 (CDYL2), mRNA [NM_152342]	-0.1891	-0.0019	132
A_01_P013066	NM_021204	Homo sapiens E-1 enzyme (MASA), mRNA. [NM_021204]	-0.1865	-0.0011	133
A_01_P016006	NM_181671	Homo sapiens phosphatidylinositol transfer protein, cytoplasmic 1 (PITPNC1), transcript variant 2, mRNA [NM_181671]	-0.1910	-0.0019	134
A_01_P015247	NM_003818	Homo sapiens CDP-diacylglycerol synthase (phosphatidate cytidylyltransferase) 2 (CDS2), mRNA [NM_003818]	-0.1881	-0.0008	135
A_01_P010568	NM_005827	Homo sapiens solute carrier family 35, member B1 (SLC35B1), mRNA [NM_005827]	-0.1919	-0.0006	136
A_01_P015983	NM_001004346	Homo sapiens methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2-like (MTHFD2L), mRNA. [NM_001004346]	-0.1901	-0.0003	137
A_01_P017707	NM_153704	Homo sapiens hypothetical protein MGC26979 (MGC26979), mRNA [NM_153704]	-0.1812	-0.0010	138
A_01_P009126	NM_032704	Homo sapiens tubulin alpha 6 (TUBA6), mRNA [NM_032704]	-0.1851	-0.0006	139
A_01_P009239	NM_153702	Homo sapiens hypothetical protein MGC10084 (MGC10084), mRNA [NM_153702]	-0.1774	-0.0013	140
A_01_P010182	NM_000946	Homo sapiens primase, polypeptide 1, 49kDa (PRIM1), mRNA. [NM_000946]	-0.1766	-0.0003	141
A_01_P011070	NM_012111	Homo sapiens AHA1, activator of heat shock 90kDa protein ATPase homolog 1 (yeast) (AHSA1), mRNA. [NM_012111]	-0.2046	-0.0006	142
A_01_P001968	NM_018132	Homo sapiens chromosome 6 open reading frame 139 (C6orf139), mRNA. [NM_018132]	-0.1992	-0.0015	143
A_01_P007128	NM_207475	Homo sapiens FLJ90680 protein (FLJ90680), mRNA. [NM_207475]	-0.1773	0.0000	144
A_01_P010687	NM_001007278	Homo sapiens ret finger protein 2 (RFP2), transcript variant 4, mRNA. [NM_001007278]	0.1753	-0.0009	145
A_01_P019891	CO725485	ILLUMIGEN_MCQ_35171 Katze_MMPL Macaca mulatta cDNA	0.1804	-0.0007	146

		clone IBIUW:26108 5' similar to Bases 1 to 543 highly similar to human PPP1R14A (Hs.348037), mRNA sequence [CO725485]			
A_01_P014996	CN641686	ILLUMIGEN_MCQ_5182 Katze_MMBR Macaca mulatta cDNA clone IBIUW:5989 5' similar to Bases 11 to 612 highly similar to human Unigene Hs.445038, mRNA sequence [CN641686]	0.1750	-0.0010	147
A_01_P002642	NM_182975	Homo sapiens hypothetical protein FLJ20403 (FLJ20403), transcript variant 3, mRNA [NM_182975]	0.1811	-0.0004	148
A_01_P001327	NM_000193	Homo sapiens sonic hedgehog homolog (Drosophila) (SHH), mRNA [NM_000193]	0.1782	-0.0019	149
A_01_P007931	NM_014555	Homo sapiens transient receptor potential cation channel, subfamily M, member 5 (TRPM5), mRNA. [NM_014555]	0.1820	-0.0006	150
A_01_P014672	NM_145201	Homo sapiens similar to CG3714 gene product (PP3856), mRNA. [NM_145201]	0.1881	-0.0009	151
A_01_P009995	NM_017514	Homo sapiens plexin A3 (PLXNA3), mRNA [NM_017514]	0.1891	-0.0018	152
A_01_P013869	NM_183242	Homo sapiens BTB (POZ) domain containing 8 (BTBD8), mRNA [NM_183242]	0.1907	-0.0014	153
A_01_P000010	NM_001298	Homo sapiens cyclic nucleotide gated channel alpha 3 (CNGA3), mRNA. [NM_001298]	0.1949	-0.0012	154
A_01_P000586	NM_006715	Homo sapiens mannosidase, alpha, class 2C, member 1 (MAN2C1), mRNA [NM_006715]	0.2128	-0.0023	155
A_01_P014052	XR_011148	PREDICTED: Macaca mulatta similar to CG8841-PA, isoform A (LOC699954), mRNA [XR_011148]	0.1918	-0.0019	156
A_01_P000976	XR_010623	PREDICTED: Macaca mulatta SET binding protein 1 (SETBP1), mRNA [XR_010623]	0.1876	-0.0019	157
A_01_P019047	CO645097	ILLUMIGEN_MCQ_7508 Katze_MMBR Macaca mulatta cDNA clone IBIUW:22673 5' similar to Bases 1 to 285 highly similar to human BTEB1 (Hs.150557), mRNA sequence [CO645097]	0.1975	-0.0007	158
A_01_P008164	CN644139	ILLUMIGEN_MCQ_9651 Katze_MMBR Macaca mulatta cDNA clone IBIUW:8946 5' similar to Bases 3 to 316 highly similar to human RAMP1 (Hs.32989), mRNA sequence	0.2014	-0.0024	159

		[CN644139]			
A_01_P014631	NM_182633	Homo sapiens hypothetical protein FLJ39963 (FLJ39963), mRNA [NM_182633]	0.2036	-0.0018	160
A_01_P013583	NM_173197	Homo sapiens Kv channel interacting protein 2 (KCNIP2), transcript variant 7, mRNA [NM_173197]	0.1953	-0.0013	161
A_01_P010032	XR_013358	PREDICTED: Macaca mulatta similar to Calretinin (CR) (LOC708409), mRNA [XR_013358]	0.1973	-0.0018	162
A_01_P013463	NM_013333	Homo sapiens epsin 1 (EPN1), mRNA [NM_013333]	0.2012	-0.0022	163
A_01_P000341	NM_003466	Homo sapiens paired box gene 8 (PAX8), transcript variant PAX8A, mRNA [NM_003466]	0.2161	-0.0017	164
A_01_P019934	NM_198085	Homo sapiens ring finger protein 148 (RNF148), mRNA. [NM_198085]	0.2303	-0.0008	165
A_01_P017541	NM_018179	Homo sapiens activating transcription factor 7 interacting protein (ATF7IP), mRNA [NM_018179]	0.2450	-0.0017	166
A_01_P018522	NM_018257	Homo sapiens chromosome 20 open reading frame 36 (C20orf36), mRNA [NM_018257]	0.2228	-0.0026	167
A_01_P018145	AB021124	Homo sapiens mRNA for N-acetylglucosamine 6-O-sulfotransferase, complete cds [AB021124]	0.2223	-0.0020	168
A_01_P015223	NM_144490	Homo sapiens A kinase (PRKA) anchor protein 11 (AKAP11), transcript variant 2, mRNA. [NM_144490]	0.2282	-0.0014	169
A_01_P017266	NM_005468	Homo sapiens N-acetylated alpha-linked acidic dipeptidase-like 1 (NAALADL1), mRNA [NM_005468]	0.2323	-0.0012	170
A_01_P012875	NM_022165	Homo sapiens lin-7 homolog B (C. elegans) (LIN7B), mRNA. [NM_022165]	0.2484	-0.0024	171
A_01_P015030	NM_006925	Homo sapiens splicing factor, arginine/serine-rich 5 (SFRS5), mRNA [NM_006925]	0.2636	-0.0009	172
A_01_P005762	NM_019092	Homo sapiens hypothetical protein KIAA1164 (KIAA1164), mRNA [NM_019092]	0.2652	-0.0016	173
A_01_P013708	NM_001008234	Homo sapiens hypothetical gene supported by BC036588 (LOC400657), mRNA. [NM_001008234]	0.2594	-0.0026	174
A_01_P000450	NM_016442	Homo sapiens type 1 tumor necrosis factor receptor shedding aminopeptidase regulator (ARTS-1), mRNA [NM_016442]	0.2691	-0.0044	175
A_01_P019269	NM_023039	Homo sapiens ankyrin repeat, family A (RFXANK-like), 2 (ANKRA2), mRNA.	0.2786	-0.0001	176

		[NM_023039]			
A_01_P016236	NM_080662	Homo sapiens peroxisomal biogenesis factor 11 gamma (PEX11G), mRNA. [NM_080662]	0.2844	-0.0040	177
A_01_P005375	NM_030751	Homo sapiens transcription factor 8 (represses interleukin 2 expression) (TCF8), mRNA [NM_030751]	0.2526	-0.0017	178
A_01_P003557	NM_006550	Homo sapiens fibrinogen silencer binding protein (FSBP), mRNA [NM_006550]	0.2724	-0.0041	179
A_01_P012207	XR_012806	PREDICTED: Macaca mulatta similar to cyclic nucleotide gated channel alpha 1 (LOC704891), mRNA [XR_012806]	0.2917	-0.0039	180
A_01_P008374	NM_080759	Homo sapiens dachshund homolog 1 (Drosophila) (DACH1), transcript variant 1, mRNA [NM_080759]	0.2980	-0.0008	181
A_01_P007050	A_01_P007050	Unknown	0.3001	-0.0024	182
A_01_P016238	XR_013013	PREDICTED: Macaca mulatta similar to Zinc finger CW-type PWWP domain protein 1 homolog (LOC711911), mRNA [XR_013013]	0.2575	-0.0025	183
A_01_P012775	NM_033258	Homo sapiens guanine nucleotide binding protein (G protein), gamma 8 (GNG8), mRNA [NM_033258]	0.2812	-0.0048	184
A_01_P004470	NM_017644	Homo sapiens DRE1 protein (DRE1), mRNA [NM_017644]	0.2883	-0.0011	185
A_01_P011760	NM_024335	Homo sapiens iroquois homeobox protein 6 (IRX6), mRNA. [NM_024335]	0.2997	-0.0027	186
A_01_P000634	A_01_P000634	Unknown	0.3189	-0.0018	187
A_01_P013045	NM_198057	Homo sapiens delta sleep inducing peptide, immunoreactor (DSIPI), transcript variant 1, mRNA [NM_198057]	0.3193	-0.0032	188
A_01_P005641	NM_005269	Homo sapiens glioma-associated oncogene homolog (zinc finger protein) (GLI), mRNA [NM_005269]	0.3316	-0.0035	189
A_01_P018564	NM_017737	Homo sapiens chromosome 1 open reading frame 39 (C1orf39), mRNA [NM_017737]	0.3157	-0.0039	190
A_01_P005675	NM_199334	Homo sapiens thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian) (THRA), transcript variant 1, mRNA [NM_199334]	0.3308	-0.0039	191
A_01_P015392	NM_001004299	Homo sapiens FLJ43980 protein (FLJ43980), mRNA. [NM_001004299]	0.3164	-0.0050	192
A_01_P002915	NM_016585	Homo sapiens Theg homolog (mouse) (THEG), transcript variant 1, mRNA [NM_016585]	0.3356	-0.0013	193
A_01_P012281	NM_130390	Homo sapiens tripartite motif-containing	0.3194	-0.0044	194

		34 (TRIM34), transcript variant 3, mRNA. [NM_130390]			
A_01_P009533	NM_020752	Homo sapiens G protein-coupled receptor 158 (GPR158), mRNA. [NM_020752]	0.3509	-0.0007	195
A_01_P009763	NM_001277	Homo sapiens choline kinase alpha (CHKA), transcript variant 1, mRNA [NM_001277]	0.3418	-0.0056	196
A_01_P007500	NM_007038	Homo sapiens a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 5 (aggrecanase-2) (ADAMTS5), mRNA [NM_007038]	0.3486	-0.0046	197
A_01_P000276	NM_145043	Homo sapiens nei like 2 (E. coli) (NEIL2), mRNA. [NM_145043]	0.3533	-0.0037	198
A_01_P015666	NM_080718	Homo sapiens T-box 5 (TBX5), transcript variant 2, mRNA [NM_080718]	0.3803	-0.0009	199
A_01_P001570	NM_177444	Homo sapiens PTPRF interacting protein, binding protein 1 (liprin beta 1) (PPFIBP1), transcript variant 2, mRNA. [NM_177444]	0.3989	-0.0078	200
A_01_P005258	A_01_P005258	Unknown	0.4063	-0.0055	201
A_01_P014819	NM_024014	Homo sapiens homeo box A6 (HOXA6), mRNA. [NM_024014]	0.3652	-0.0060	202
A_01_P017300	A_01_P017300	Unknown	0.4272	-0.0042	203
A_01_P013244	NM_001085	Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3 (SERPINA3), mRNA. [NM_001085]	0.8166	-0.0109	204
A_01_P013420	NM_153007	Homo sapiens outer dense fiber of sperm tails 4 (ODF4), mRNA [NM_153007]	1.2039	-0.0072	205