Table S1: Sequence information of tested sgRNA

Oligo name	Sequence (5’ to 3’)	
sgRictor-1	Sense Antisense	CAC CGC CGA TCG CCG CCA TAT TGA AAA CTC AAT ATG GCG GCG ATC GGC
sgRictor-2	Sense Antisense	CAC CGA TCT GAC CCG AGG TAA CGC G AAA CCG CGT TAC CTC GGG TCA GAT C
sgRictor-3	Sense Antisense	CAC CGA CAA GAC CTC CAG TTC CAG A AAA CTC TGG AAC TGG AGG TCT TGT C
sgRictor-4	Sense Antisense	CAC CGT AGC AGT GAT CCA AAA GGA AAA CTC CTT TTG GAT CAC TGC TAC
sgRictor-5	Sense Antisense	CAC CGT CTT TCA GGT TTC ATC CCA G AAA CCT GGG ATG AAA CCT GAA AGA C
sgRaptor-1	Sense Antisense	CAC CGG TCC TGG CCT TCA GCC CCG AAA CCG GGG CTG AAG GCC AGG ACC
sgRaptor-2	Sense Antisense	CAC CGC ATT TCG GAC TCC ATC AGT G AAA CCA CTG ATG GAG TCC GAA ATG C
sgRaptor-3	Sense Antisense	CAC CGG GAA ACT ACC AAG TTC AAG AAA CCT TGA ACT TGG TAG TTT CCC

Table S2: Sequence information of primers used for IFN PCR detection.

Primer name	Sequence (5' to 3')		Product size (bp)
IFN-α1	Sense Antisense	GGC TCT GGT GCA TGA GAT GT GCC TTC TTC CTG AAT CTG TCT TA	337
IFN-α5/6	Sense Antisense	GCA CAA ATG AGG AGA ATA TCT CCT CCT GAG TCT GTC TTG	437
IFN-α7/11	Sense Antisense	GGG ACT TTG GAT CCC CTC AT GTG GAG GAA GAG AAG GAT G	369
IFN-α9	Sense Antisense	GTG CTG CTC AGC TGC AAG AGT CCT CCT CCA GCA GGG GC	384
IFN-α12	Sense Antisense	CCT CAG CCT TCC TCA CGG T CTC ATG ACT TCT GCC CTG AT	509
IFN-αω	Sense Antisense	AGA TCT TCC GCC TCT TCA GCA CAA TTC TGG TTT CCA CCC TGA CAA CCT	261
IFN-β	Sense Antisense	ATG TCA GAA GCT CCT GGG ACA GTT AGG TCA TCC ATC TGC CCA TCA AGT	246
IFN-δ1	Sense Antisense	TAT AAG CTT CTG GCA GGA GT AGC CTT GAG TCA TCT TGT	205
IFN-δ3/4/5	Sense Antisense	AGA ACT TGT CTG CTG TCC ATT TTT GGA GAA GAC ACC GGA	209
IFN-δ6/7	Sense Antisense	CAA TGG CCC ACA TCC ATT TGC T AGA TGT GTC ACA AGT GTG CCT	214

IFN-δ8/9	Sense Antisense	ATG CTC TGC TCC ACT CCT GC GTG CCT TGA GTC ATC TGG ATT GG	194
IFN-ε	Sense Antisense	TTG GTA CTG CTG GCT TCT TCC ACT AAC TGC CCT GAA GAG GCT GAA GAT	255
IFN-κ	Sense Antisense	GCA GAA TGA GCC ATT CGT TTC CCA TCC TCT TCC TCC TGC AAG CAT TGT	259
IFN-ω1	Sense Antisense	TGG TGC TTC TGC GTC AGA TG CTC ACC TGC ACC AAG CAG GAC	265
IFN-ω2	Sense Antisense	TTC GTG CTC TCT CTA CCG ATG CAG AGA TGG CCT GGA CCT	225
IFN-ω4	Sense Antisense	TCT GCA TCA GAT GAG GAG AC CAA ATG TCT GCT CTT CCA TCT	278
IFN-ω5	Sense Antisense	TCA TGC TCT CTC TAC TGA CAG C TGG AGC TTG TCC AGG AGG A	300
IFNAR1	Sense Antisense	ACC ACA GTG AAA CAT CAC CTG CCT TGT TGA TGA CGG GAG GAA ACA GGA	349
IFNAR2	Sense Antisense	TCA ACG GGA ATC AGA GTC GTC AGA TCA GGA AAT ACC CAG GCG GAC AAT	180
β-Actin	Sense Antisense	TCG CCG ACA GGA TGC AGA AGG A AGG TGG ACA GCG AGG CCA GGA T	129

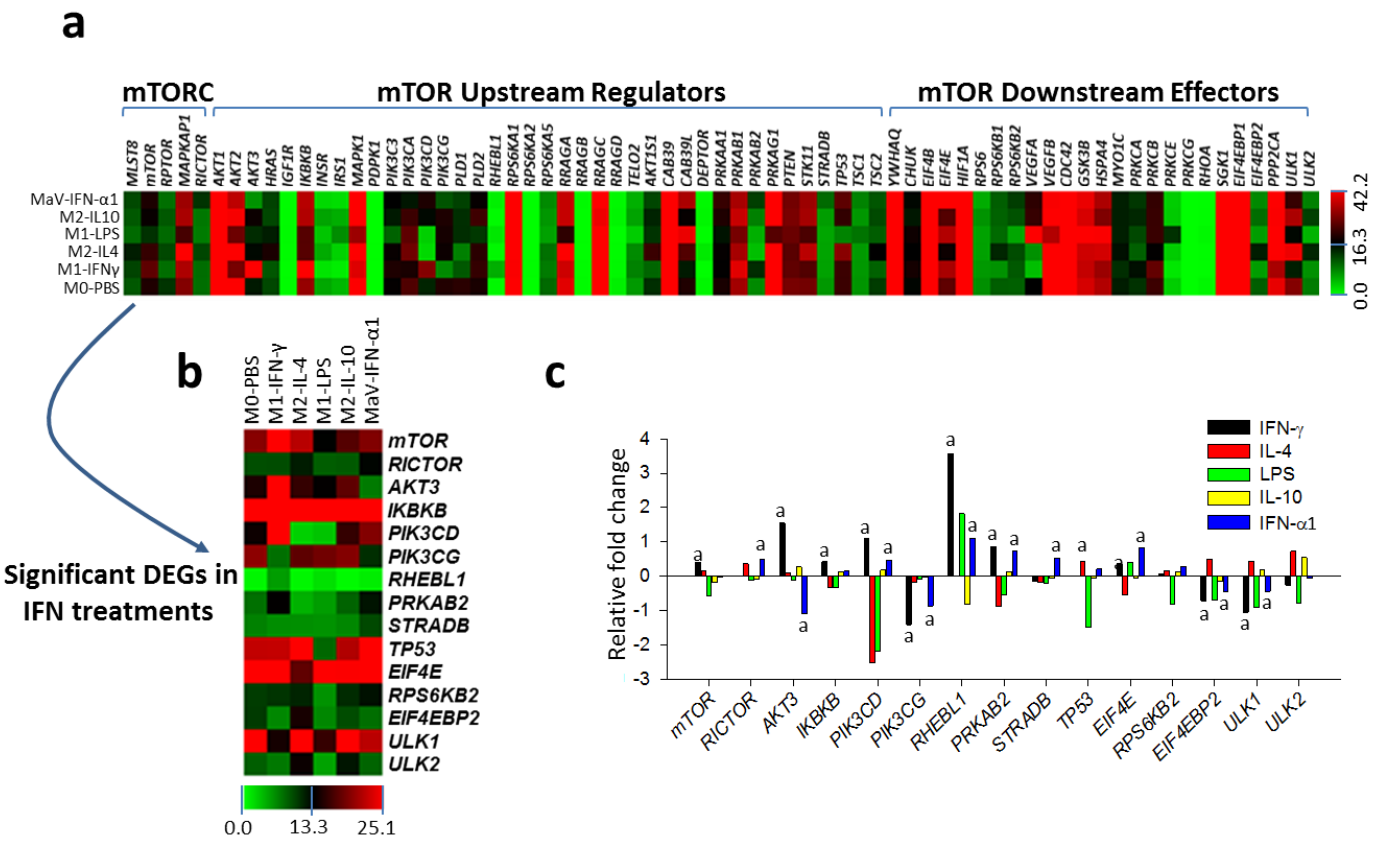

Figure S1. RNA-Seq analysis of DEGs in PRRSV-infected porcine alveolar MΦs at different activation statuses. The whole dataset of the RNA-Seq analysis is published in Sang et al. (2014). (a) Subsets of genes involved in the mTOR signaling pathway were extracted and displayed using a heatmap to show relative gene expression normalized as reads per kilobase of transcript per million reads mapped (RPKM). Some DEGs, which were significantly regulated in cytokine treatments compared with the control, served as candidate genes for regulation of antiviral response, and were further emphasized using a heatmap (RPKM) (b) and a bar chart (log of fold changes to the control) at the bottom (c). [a]*p* (FDR, false discovery rate) < 0.001 to the control of PBS. All gene symbols are from NCBI Gene database (http://www.ncbi.nlm.nih.gov/gene/).

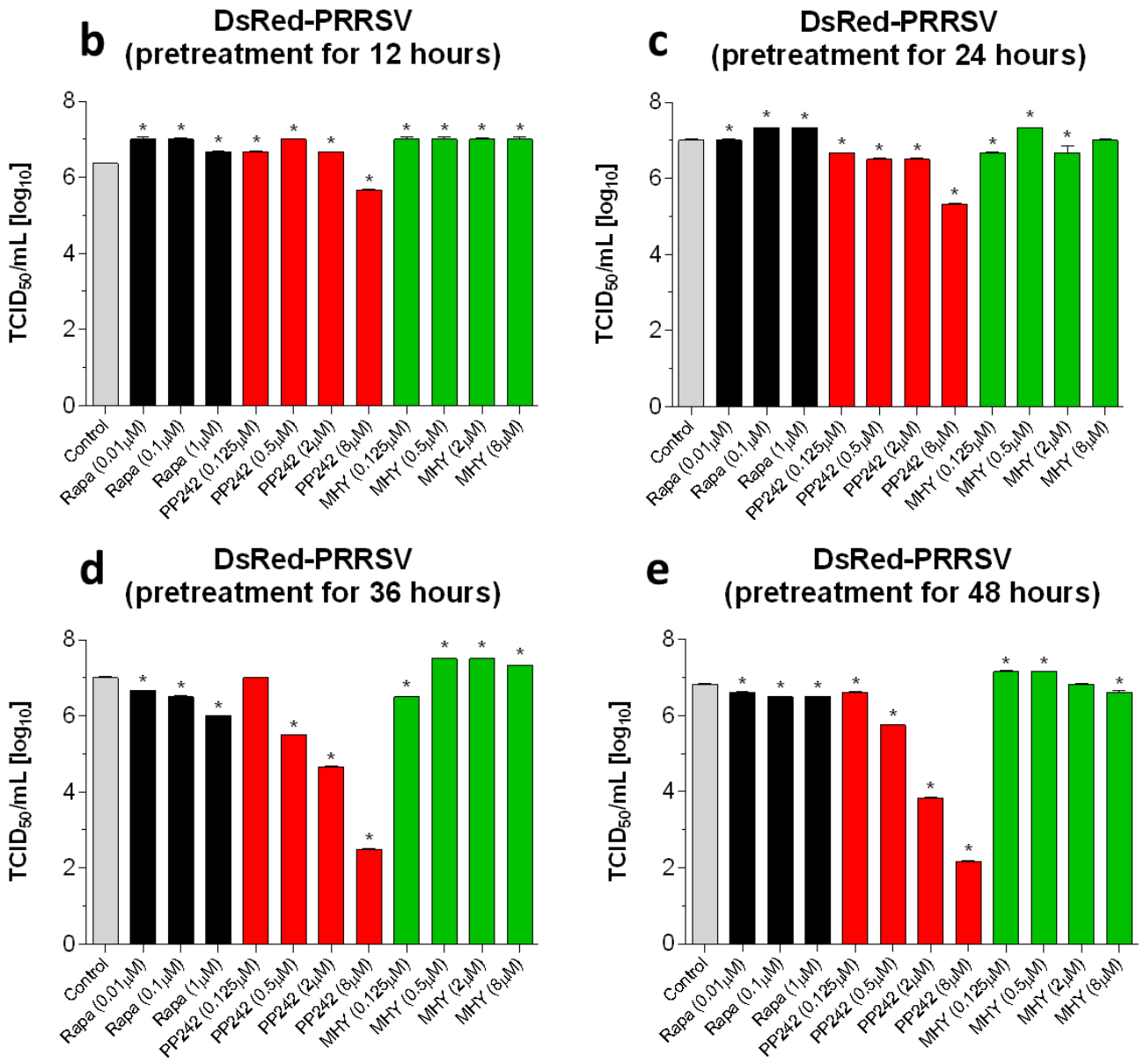

Figure S2. Titration of PRRSV stocks collected corresponding to Fig. 1b-1e. Equal volume (5 µL) of culture supernatants collected from cells treated and infected with PRRSV as in Fig. 1b-1e, was titrated in MARC-145 cell monolayer for 72 h. Viral cytopathic effect was examined using crystal violet staining, and the dye was extracted and quantified with a microplate reader at absorbance of 570 nm. Viral titers was then determined by Reed-Muench method to define the highest dilution that reduced the cell number by 50% (TCID50/ml). Data are n = 3, *p<0.05 to the control.