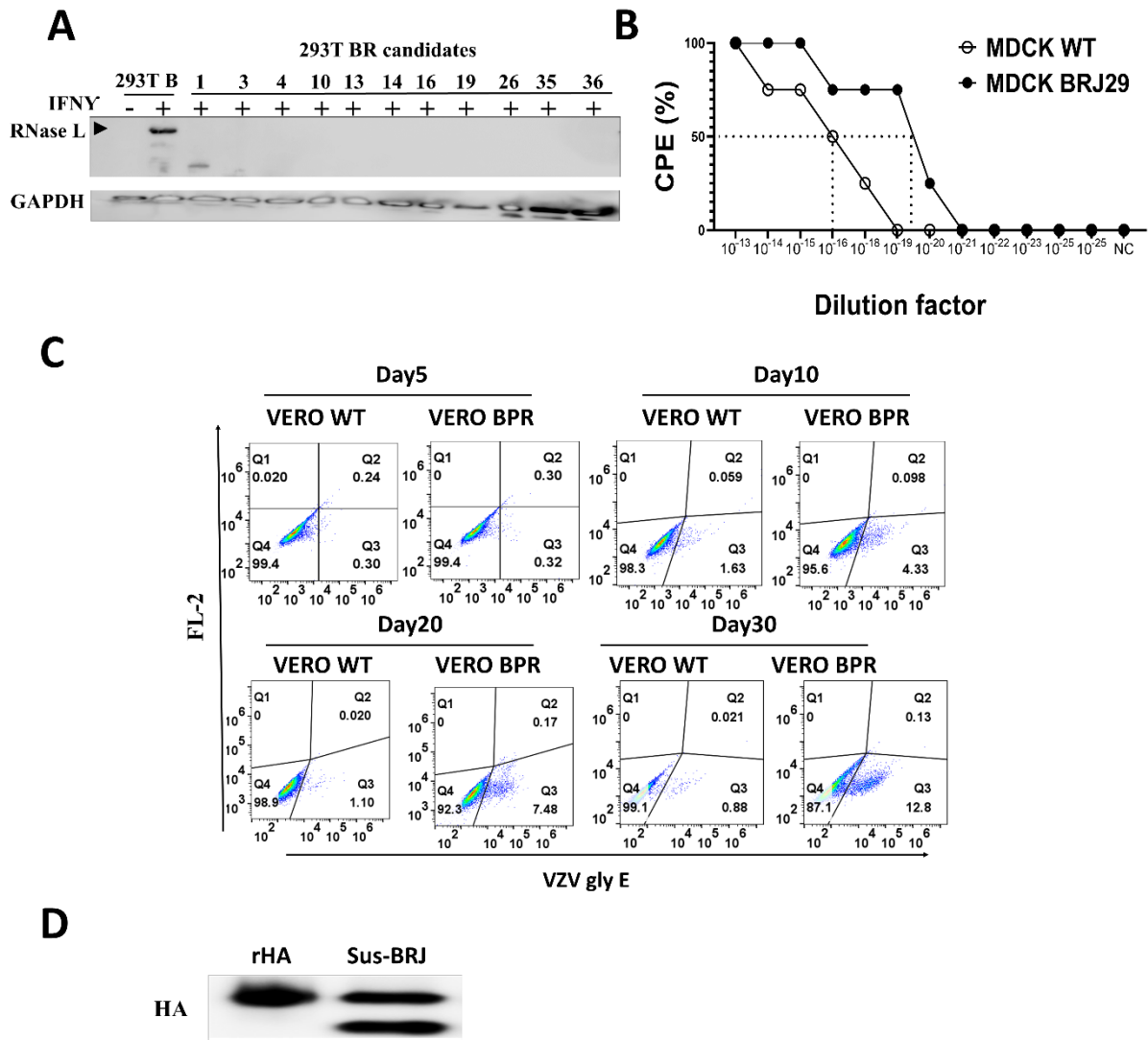


Table S1 Sequence Variants Induced by Knockout

293T-BRJ		Sequences																Alterations
BST2 WT seq. A.A	AAG CGC TGT AAG CTT CTG CTG GGG ATA GGA ATT CTG GTG CTC CTG ATC ATC GTG ATT CTG GGG	wild type																
Chr1.mutant A.A	AAG CGC TGT AAG CTT CGG AAT TCT GGT GCT CCT GAT CAT CGT GAT TCT GGG ~ ACC TGA	Δ11																
Chr2.mutant A.A	AAG CGG AAT TCT GGT GCT CCT GAT CAT CGT GAT TCT GGG GGT GCC CTT GAT ~ ACC TGA	Δ23																
RNaseL WT seq. A.A	²⁴⁹⁵ ²⁴⁹⁸ ²⁵⁰¹ ²⁵⁰⁴ ²⁵⁰⁷ ²⁵¹⁰ ²⁵¹³ ²⁵¹⁶ ²⁵¹⁹ ²⁵²² ²⁵²⁵ ²⁵²⁸ ²⁵³¹ ²⁵³⁴ ²⁵³⁷ ²⁵⁴⁰ ²⁶⁷⁸ CAT AAC AAC CCC CAG GAG GGA CCC ACG TCC TCC AGC GGT AGA AGG GCT ~ GTA	wild type																
Chr1.mutant A.A	²⁴⁹⁵ ²⁴⁹⁸ ²⁵⁰¹ ²⁵⁰⁴ ²⁵⁰⁷ ²⁵¹⁰ ²⁵¹³ ²⁵¹⁶ ²⁵¹⁹ ²⁵²² ²⁵²⁵ ²⁵²⁸ ²⁵³¹ ²⁵³⁴ CAT AAC AAC CCC CCA GGA GGG ACC CAC GTC CTC CAG CGG TAG	+1																
Chr2.mutant A.A	²⁴⁹⁵ ²⁴⁹⁸ ²⁵⁰¹ ²⁵⁰⁴ ²⁵⁰⁷ ²⁵¹⁰ ²⁵¹³ ²⁵¹⁶ ²⁵¹⁹ ²⁵²² ²⁵²⁵ ²⁵²⁸ ²⁵³¹ ²⁵³⁴ ²⁶⁷⁵ ²⁶⁷⁸ CAT AAC AGG AGG GAC CCA CGT CCT CCA GCG GTA GAA GGG CTG ~ AAA TGA	Δ7																
Chr3.mutant A.A	²⁴⁹⁵ ²⁴⁹⁸ ²⁵⁰¹ ²⁵⁰⁴ ²⁵⁰⁷ ²⁵¹⁰ ²⁵¹³ ²⁵¹⁶ ²⁵¹⁹ ²⁵²² CAT AAC AAC CCC CAC GTC CTC CAG CGG TAG	Δ11																
JAK1 WT seq.	GCC CCC CCG TTG ATC GTC CAC AAC ATA CAG AAT GGC TGT CAT GGT CCA ATC TGG TTG GTC	wild type																
Chr1.mutant A.A	GCC CCG TCC ACA ACA TAC AGA ATG GCT GTC ATG GTC CAA TCT GGT TGG TCC TAG	Δ10																
Chr2.mutant A.A	GCC CCC CCG TTG TCC ACA TAC AGA ATG GCT GTC ATG GTC CAA TCT GGT TGG TCC TAG	Δ4																
Chr3.mutant A.A	GCC CCC CCG TTG ACA TAC AGA ATG GCT GTC ATG GTC CAA TCT GGT TGG TCC TAG	Δ10																
VERO BPRJ		Sequences																Alterations
BST2 WT chr. A.A	GTG CTT CTG GGG GTG CCC CTG ATT TTC TTC ATC ATC AAG GCC ~ TGT TAA	wild type																
Chr1.mutant A.A	GTG CTT CTG GGG GTG CCC TGA	Δ1																
Chr2.mutant A.A	GTG CTT CTT GCC CCT GAT TTT CTT CAT ~ GGG TAG	Δ5																
PKR WT chr. A.A	ATA CAG GAC CTC CAC ATG ATA GGA GGT AAG TTG	wild type																
Chr1.mutant A.A	ATA CAG GAC CTC CAC ATG AGG AGG TAA	Δ2																
Chr2.mutant A.A	ATA CAG GAC CTC CAC ATG ATG TGT AGG AGG TAA	+4																
RNaseL WT seq. A.A	ATG ATA GCC AGG CGG AAT TAT GAC CAT TCC CTT GTG AAG	wild type																
Chr1.mutant A.A	ATG ATA GCC CAG GCG GAA TTA TGA	+1																
Chr2.mutant A.A	ATG ATA GCC GGC GGA ATT ATG ACC ATT CCC TTG TGA	Δ1																
JAK1 WT chr. A.A	GTG GAC GAT CAA CGG GGG GGC CAC GTC GGT GCA GAG GTA ATG ATG GGC GTC TGC GGT GAG	wild type																
Chr1.mutant A.A	GTG GAC GAT TCA ACG GGG GGC CCA CGT CGG TGC AGA GGT AAT GAT GGG CGT CTG CGG TGA	+1																
Chr2.mutant A.A	GTG GAC ACG TCG GTG CAG AGG TAA	Δ16																

MDCK BRJ	Sequences																			Alterations		
BST2 WT seq. A.A	CCC	ATA	ACT	GAC	GAG	TCA	GAG	TCA	ATG	TCA	TCA	AGT	CAG	AAG	CTG	AGC	TGG	CTG	GAG	TGG	CTG	wild type
Chr1.mutant A.A	CCC	ATA	ACT	AGA	GTC	AGA	GTC	AAT	GTC	ATC	AAG	TCA	GAA	GCT	GAG	CGT	GCT	~	AGT	TGA	*	Δ3,+1
Chr2.mutant A.A	CCC	ATA	ACT	GAT	CAG	AGT	CAA	TGT	CAT	CAA	GTC	AGA	AGC	TGA								Δ4
RNaseL WT seq. A.A	ACA	TCA	GTT	GAT	GGC	AAT	CAG	TTG	ATC	CAA	GCT	ATT	AAA	AAA	GAA	GAC	ATT	AAG	CTG			wild type
Chr1.mutant A.A	ACA	TCA	GTT	GGA	TGG	CAA	TCA	GTT	GAT	CCA	AGC	TAT	TAA	*								+1
Chr2.mutant A.A	ACA	TCA	GTA	TGG	ATG	GCA	ATC	AGT	TGA													+2
JAK1 WT chr. A.A	GTG	GAC	GAT	CAA	TGG	GGG	AGC	CAC	ATC	AGT	GCA	GAG	GTA	ATG	ATG	GGC	ATC	TGC	TGT	GAG		wild type
Chr1.mutant A.A	GTG	GAC	GAT	TTC	AAT	GGG	GGA	GCC	CAC	TCA	GTG	CAG	AGG	TAA	*							+2
Chr2.mutant A.A	GTG	GAC	GAT	ACA	ATG	GGG	GAG	CCA	CAT	CAG	TGC	AGA	GGT	AAT	GAT	GGG	CAT	CTG	CTG	TGA	*	+1



S1. Enhanced virus production in multi-gene knockout cell lines

- (A) RNase L gene deficiency abolished IFN γ -induced RNase L expression. Arrow point to RNase L.
- (B) Influenza B virus, the Yamagata (B/Wisconsin/1/2010) strain was produced in MDCK WT and BRJ cells, and then an equal volume of culture supernatant was serially diluted and inoculated into MDCK WT cells, and the virus titer was measured as the percentage of cytopathic effect.
- (C) Expression of VZV glycoprotein E in Vero WT and BPR cells during serial passage of VZV (Oka strain).
- (D) 100ng of recombinant HA protein (Sinobiological, 11052-V08H-50) and 4 μ l of serum-free and suspension culture supernatant from MDCK-BRJ cells infected with influenza H1N1 were compared by Western blotting.