

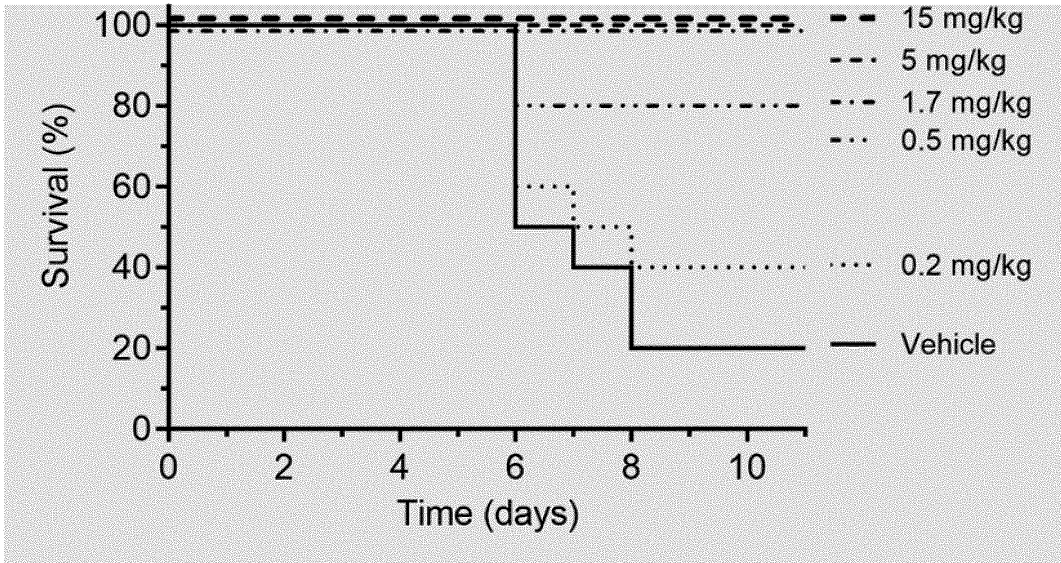


Figure 1

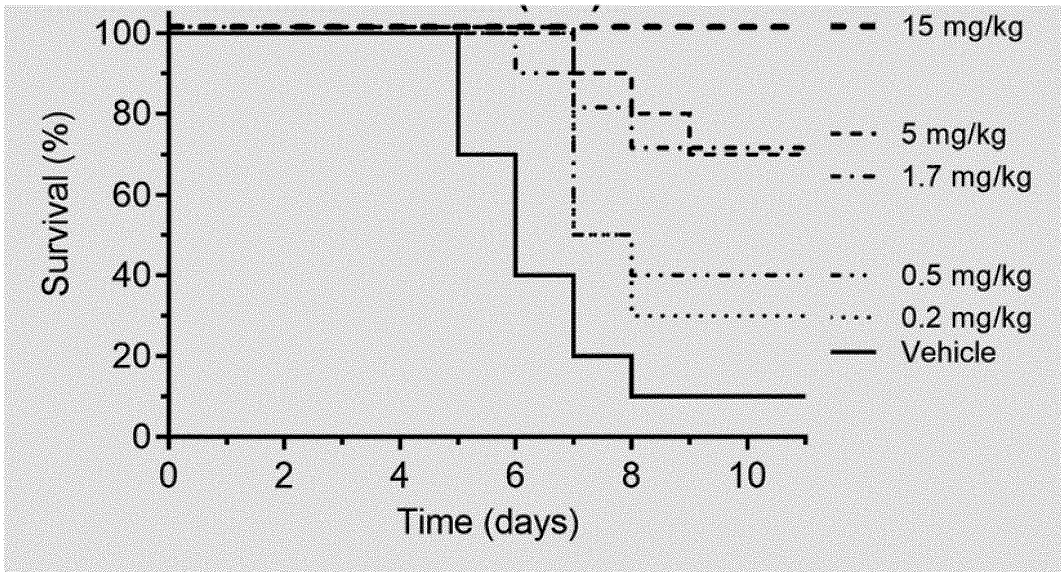


Figure 2

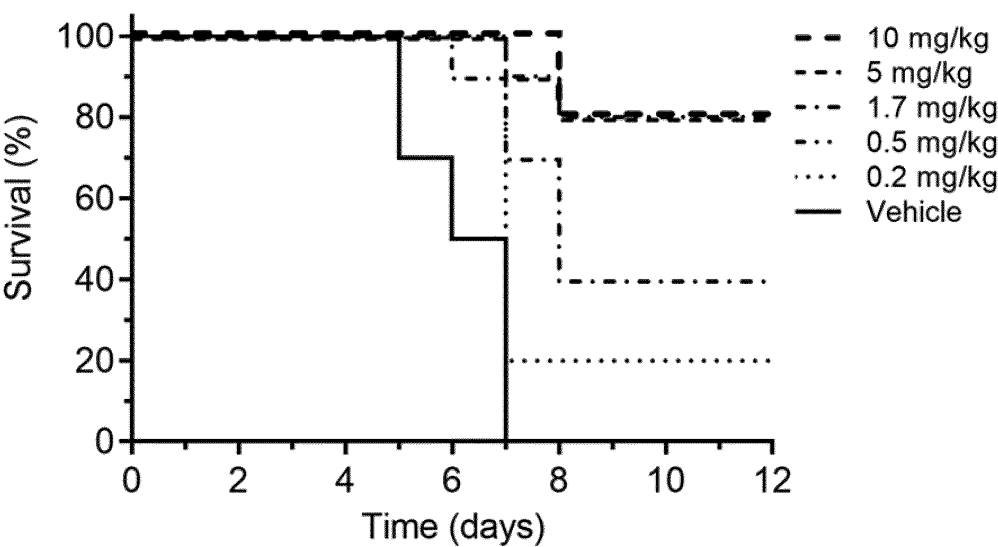


Figure 3

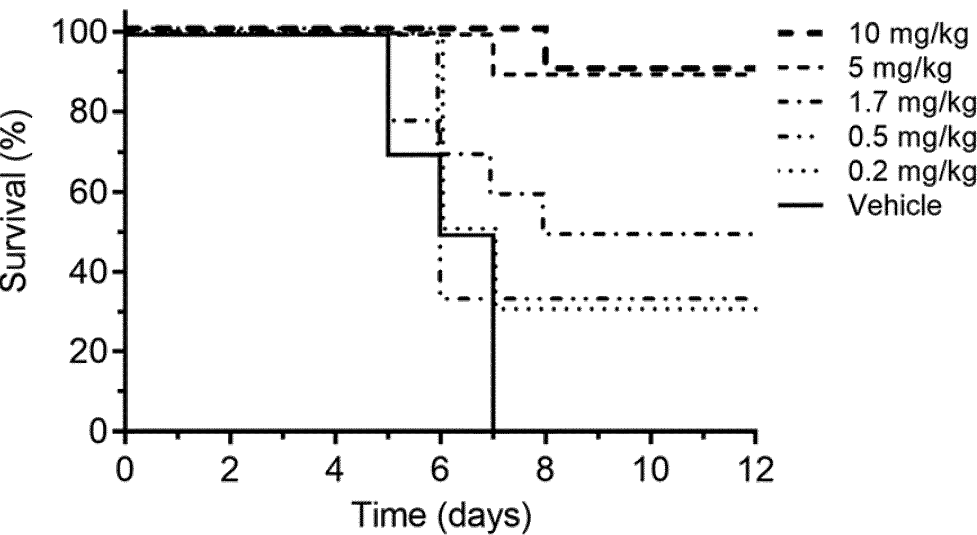


Figure 4

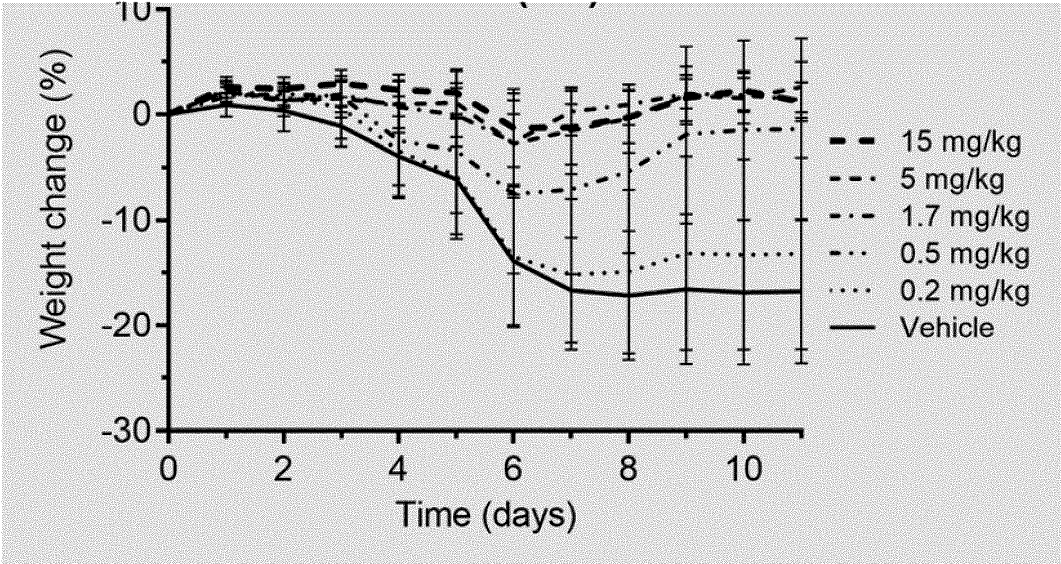


Figure 5

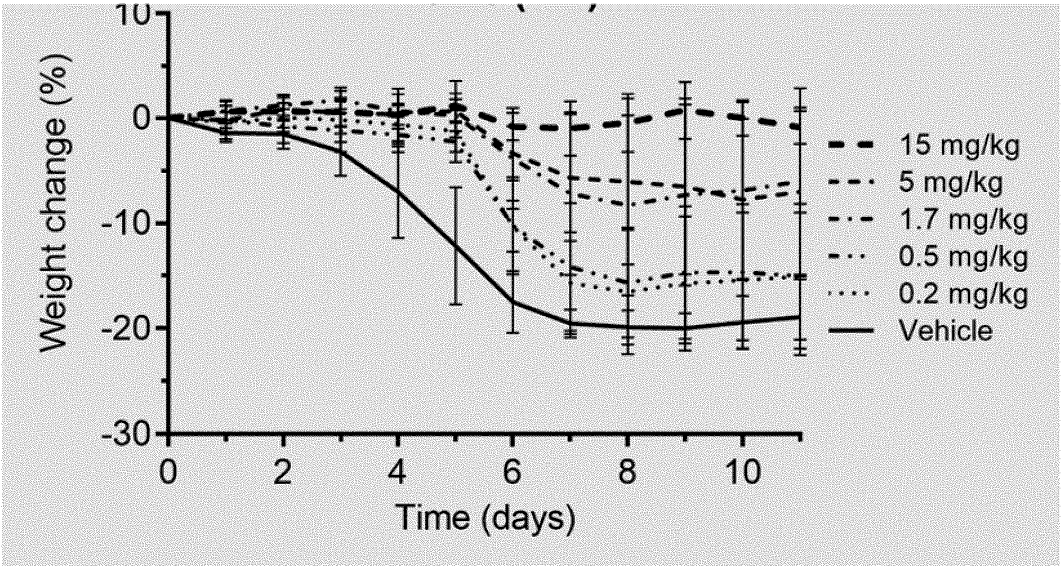


Figure 6

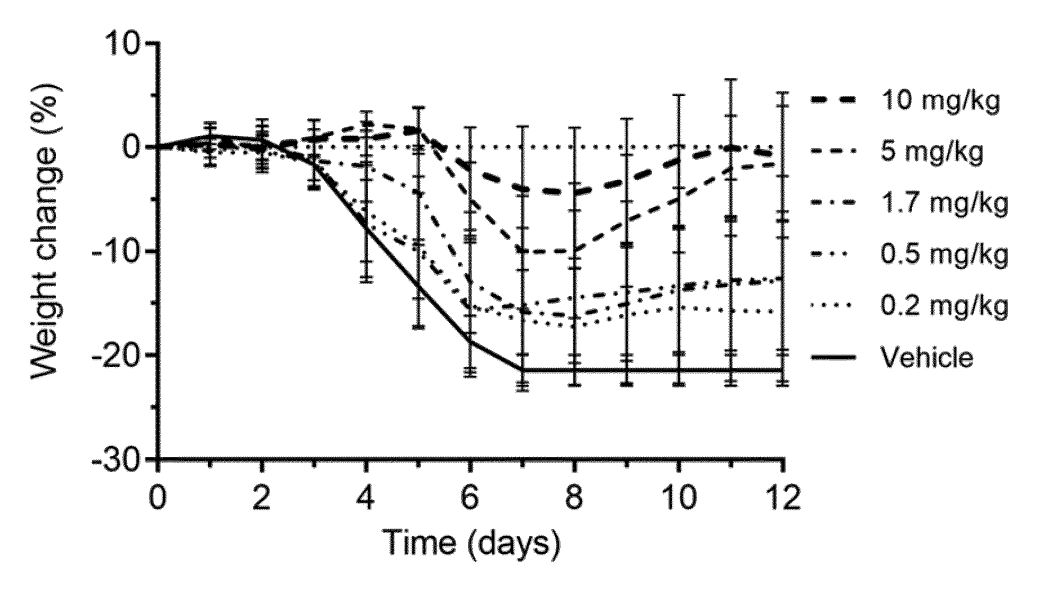


Figure 7

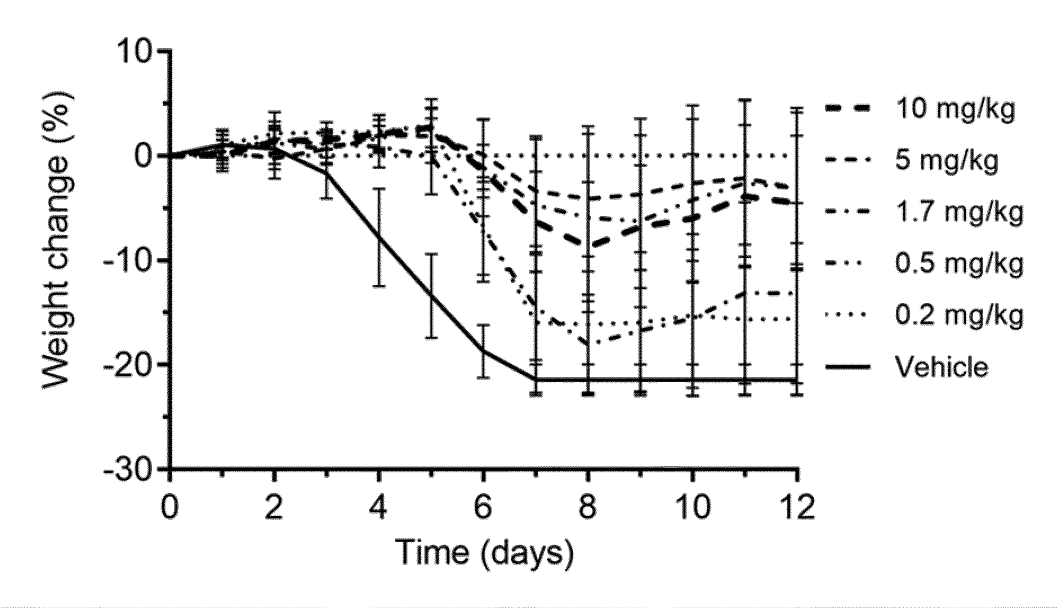
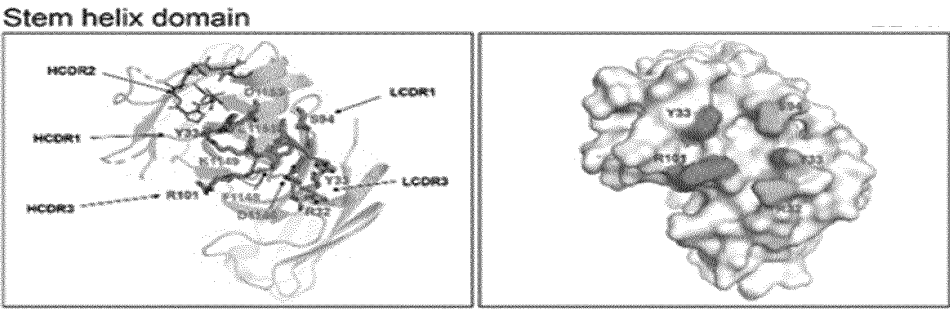


Figure 8

Stem helix domain (SH)																								
1142												1162												
HCoV-229E	V	P	E	Y	-	-	I	D	V	N	K	T	L	Q	E	L	S	Y	K	L	P	N	Y	
HCoV-NL63	I	P	D	Y	-	-	V	D	V	N	K	T	L	Q	E	F	A	Q	N	L	P	K	Y	
HCoV-HKU1	I	-	P	N	L	-	S	D	F	E	A	E	L	S	L	W	F	K	N	H	T	S	I	
HCoV-OC43	I	-	P	N	L	-	P	D	F	K	E	E	L	D	Q	W	F	K	N	Q	T	S	V	
SARS-CoV-1	Q	-	P	E	L	-	D	S	F	K	E	E	L	D	K	Y	F	K	N	H	T	S	P	
SARS-CoV-2	Q	-	P	E	L	-	D	S	F	K	E	E	L	D	K	Y	F	K	N	H	T	S	P	*
MERS-CoV	L	G	N	S	T	G	I	D	F	Q	D	E	L	D	E	F	F	K	N	V	S	T	S	

A



B

Figure 9