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Identical/Similar

HRI region

Wuhan-Hu-1
Alpha
Beta
Gamma
Delta
Omicron
SARS-1
MERS



HR2 region

Wuhan-Hu-1
Alpha
Beta
Gamma
Delta
Omicron
SARS-1
MERS

FIG. 2

HR2 Region of SARS CoV2

HR2_region	VVIGIVNNTVYDPLQPELDSFKEELDKEYFKNHTSPDVLGDISGINASVVNIQKEIDRLNEVAKNLESIDLQEL
HR2A	-----DISGINASVVNIQKEIDRLNEVAKNLESIDLQEL
HR2C	-----FKNHTSPDVLGDISGINASVVNIQKEIDRLNEVAK-----
HR2B	VVIGIVNNTVYDPLQPELDSFKEELDKEYFKNHTSPD-----
EK1	-----SLDQINVTFLDLEYEMKKLEEAIKKLEESYIDLKEL

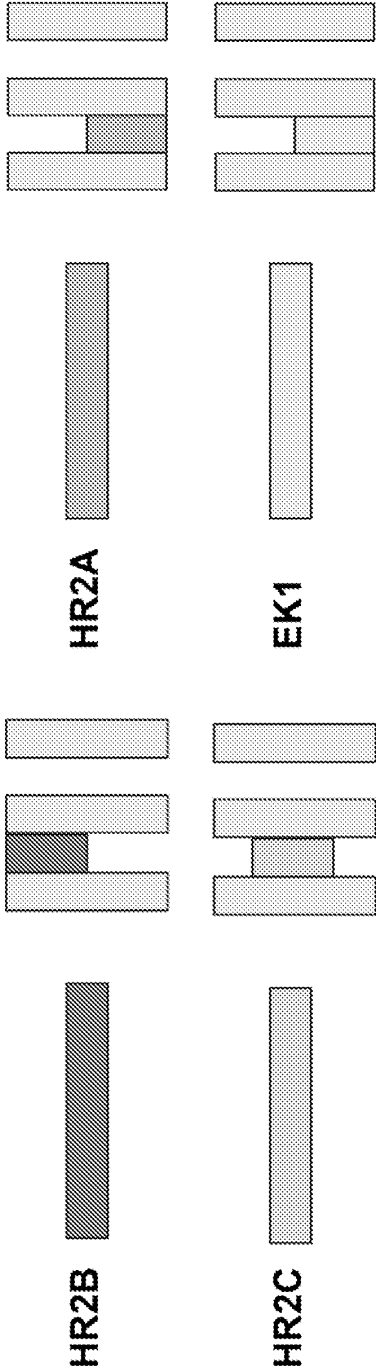


FIG. 3

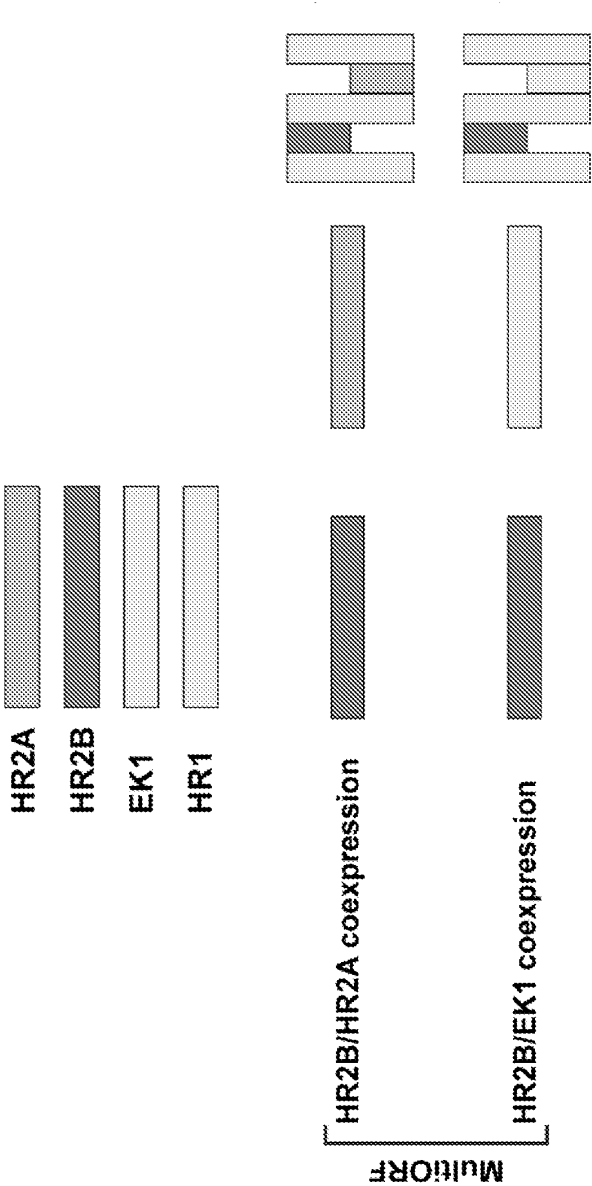


FIG. 4B

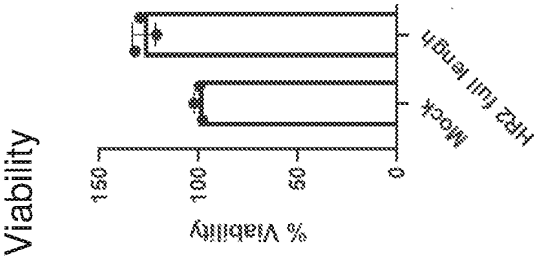


FIG. 4A

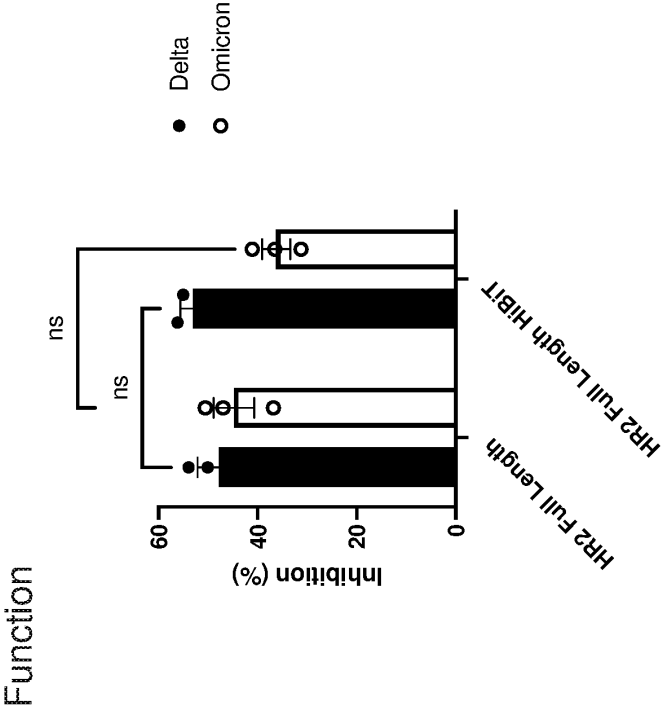


FIG. 5

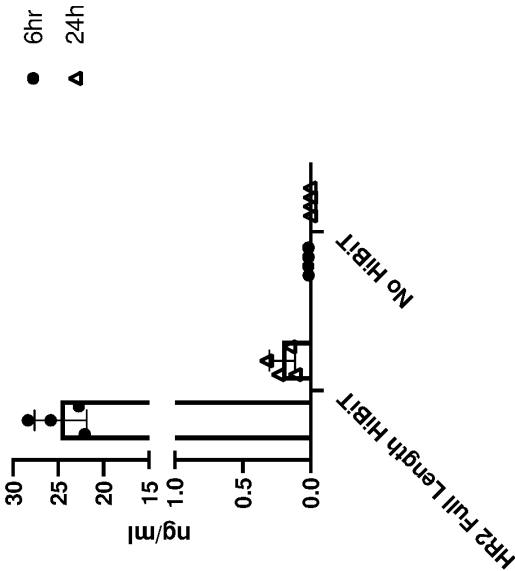
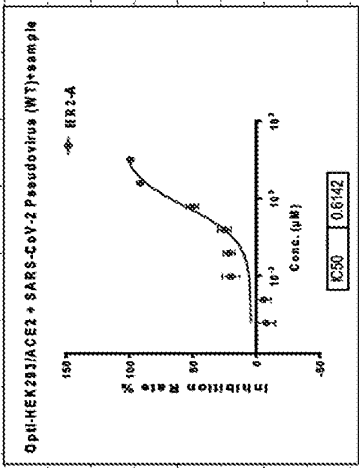


FIG. 6A

HR2A



Wuhan

Omicron

FIG. 6B

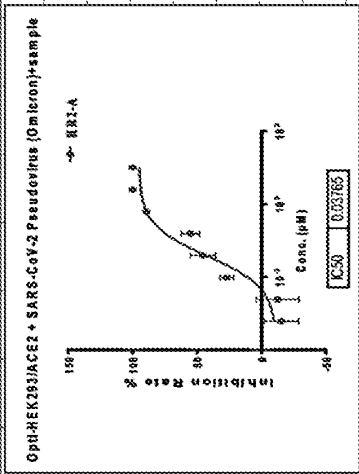


FIG. 7A

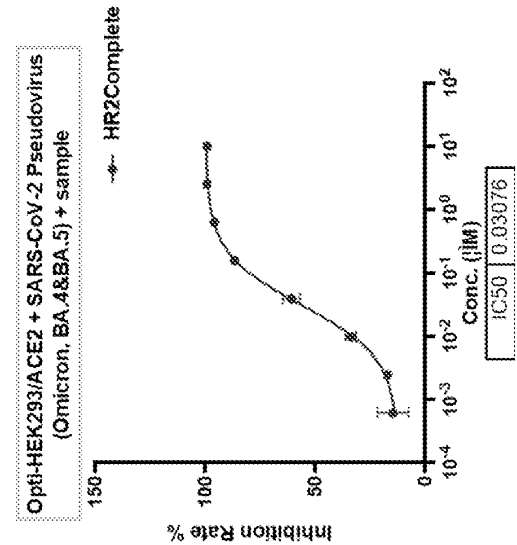


FIG. 7B

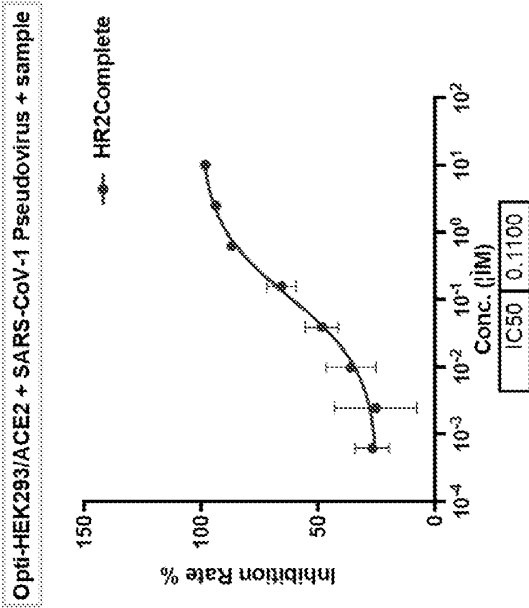


FIG. 8A

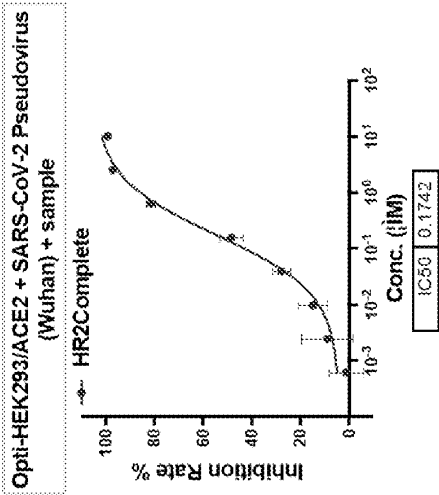


FIG. 8B

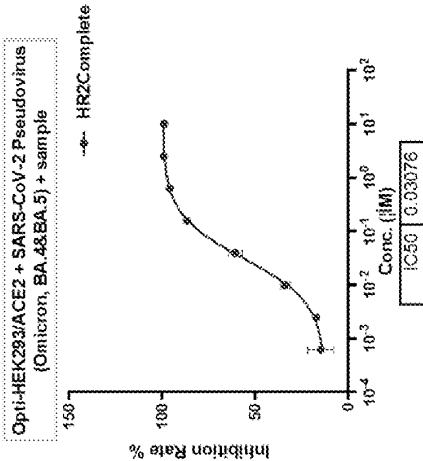


FIG. 8C

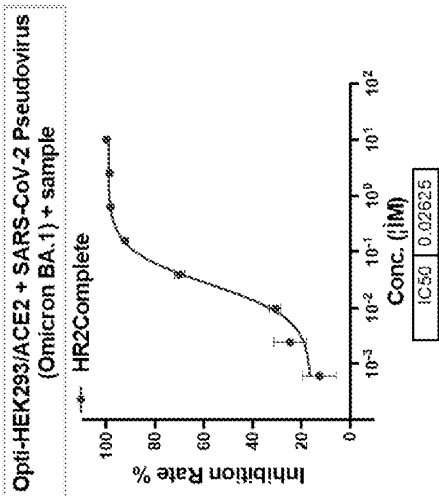


FIG. 8D

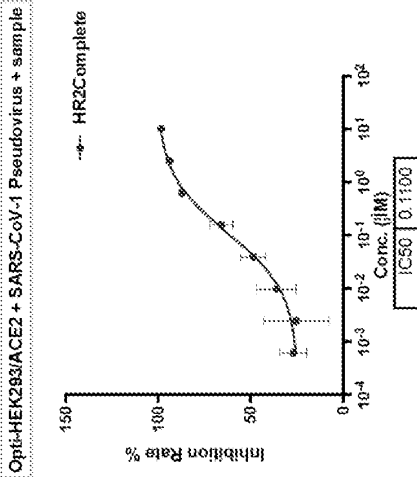


FIG. 9

Construct Design ▶	spacer element		IRES	Antifusogenic polypeptide	
	HIV_CHR				
	T20		TTWMEWDREINNYTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF		
	T2410		-----YISLIHSLIEESQNQQEKNEQELLELDKWASLWNWF		
	TC2410__2.0		MTWMEWDREINNYTSLIHSLIEESQNQQEKNEQELLEL-----		
	T1144		MTWMEWDREINNYTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF		
	T1144__2.0		TTWEAWDRAIAEYAAARIEALLRALQEQQEKNEAALREL-----		
	T1249		TTWEAWDRAIAEYAAARIEALLRALQEQQEKNEAALRELDKWASLWNWF		
	T1249__2.0		---WQEWQK-----ITALLEQAQIQQEKNEYELQKLDKWASLWQWF		
	T2635		TTWQEWQK-----ITALLEQAQIQQEKNEYELQKLDKWASLWQWF		
	T2635__2.0		TTWEAWDRAIAEYAAARIEALIRAAQEQQEKNEAALREL-----		
	T2635__3.0		TTWEAWDRAIAEYAAARIEALIRAAQEQQEKNEAALRELDKWASLWNWF		
	TC290676		MTWEAWDRAIAEYAAARIEALIRAAQEQQEKNEAALRELDKWASLWNWF		
	T290676__2.0		TTWEAWDRAIAEYAAARIEALIRASQEQQEKNEAELREL-----		
			TTWEAWDRAIAEYAAARIEALIRASQEQQEKNEAELRELDKWASLWNWF		

FIG. 10A

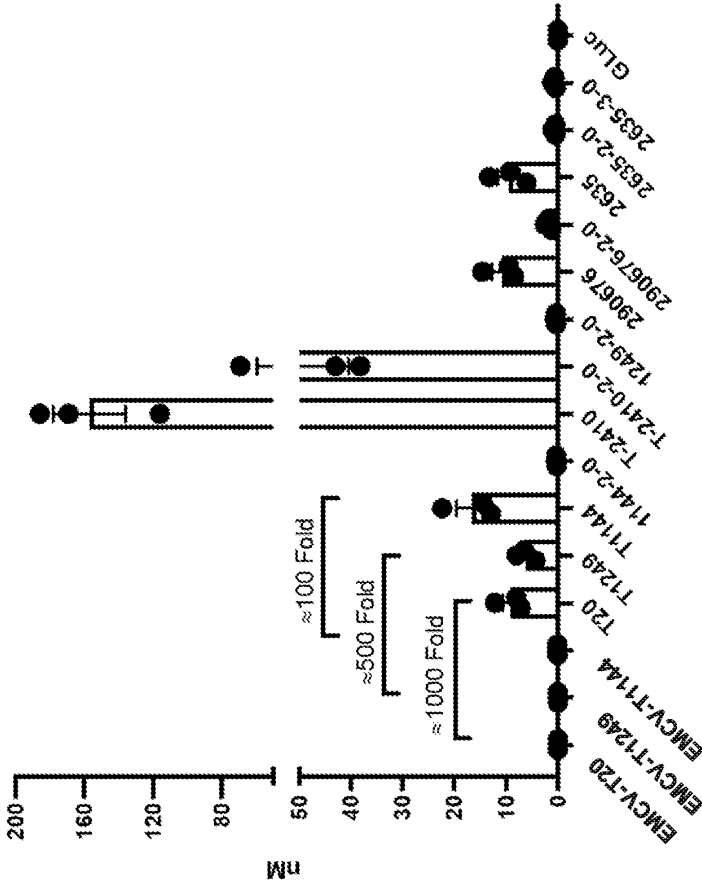


FIG. 10B

TP dilution	ng/ml			nM		
	1/10	1/40	1/200	1/10	1/40	1/200
EMCV -T20	0.03	0.03	0.03	0.0	0.0	0.0
EMCV -T1249	0.10	0.10	0.00	0.0	0.0	0.0
EMCV T1144	0.78	0.78	0.43	0.1	0.1	0.1
T20	41.51	70.11	46.40	7.2	12.2	8.1
T1249	40.83	50.61	27.30	6.5	8.0	4.3
T1144	83.72	129.11	74.83	14.5	22.4	13.0
1144-2-0	1.56	2.37	1.73	0.3	0.4	0.3
T-2410	703.38	1126.75	1026.00	116.1	186.0	169.4
T-2410-2-0	223.61	360.71	198.90	43.0	69.4	38.3
1249-2-0	1.77	3.17	2.20	0.3	0.6	0.4
290676	55.45	85.28	49.20	9.5	14.6	8.4
290676-2-0	10.48	14.98	7.80	1.8	2.6	1.3
2635	40.83	58.91	26.87	9.2	13.3	6.1
2635-2-0	2.86	5.99	2.87	0.5	1.0	0.5
2635-3-0	3.80	6.61	2.23	0.7	1.1	0.4
GLUC	0.07	0.03	0.07	0	0.0	0.0

FIG. 11B

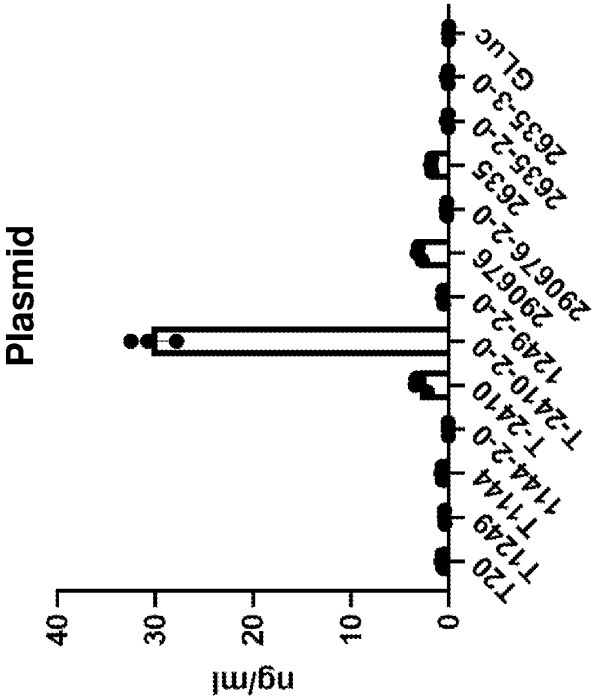


FIG. 11A

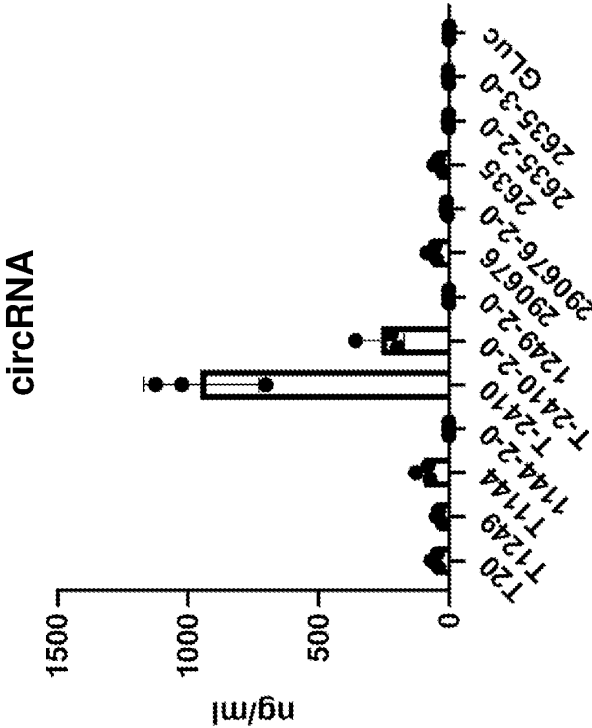


FIG. 12

	ng/ml				nM			
	TP/dilution	1/10	1/40	1/200	1/10	1/40	1/200	1/200
	EMCV T20	0.03	0.03	0.03	0.0	0.0	0.0	0.0
	EMCV T1249	0.10	0.10	0.00	0.0	0.0	0.0	0.0
	EMCV 1144	0.78	0.78	0.43	0.1	0.1	0.1	0.1
	T20	41.51	70.11	46.40	7.2	12.2	8.1	8.1
	T1249	40.83	50.61	27.30	6.5	8.0	4.3	4.3
	T1144	83.72	129.11	74.83	14.5	22.4	13.0	13.0
	1144-2-0	1.56	2.37	1.73	0.3	0.4	0.3	0.3
	T-2410	703.38	1126.75	1026.00	116.1	186.0	169.4	169.4
	T-2410-2-0	223.61	360.71	198.90	43.0	69.4	38.3	38.3
	1249-2-0	1.77	3.17	2.20	0.3	0.6	0.4	0.4
	290676	55.45	85.28	49.20	9.5	14.6	8.4	8.4
	290676-2-0	10.48	14.98	7.80	1.8	2.6	1.3	1.3
	2635	40.83	58.91	26.87	9.2	13.3	6.1	6.1
	2635-2-0	2.86	5.99	2.87	0.5	1.0	0.5	0.5
	2635-3-0	3.80	6.61	2.23	0.7	1.1	0.4	0.4
	GLuc	0.07	0.03	0.07	0	0.0	0.0	0.0