

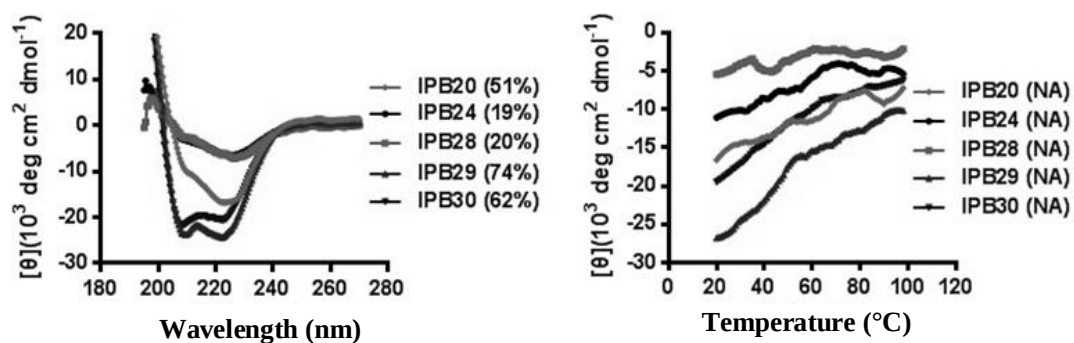


FIG. 1

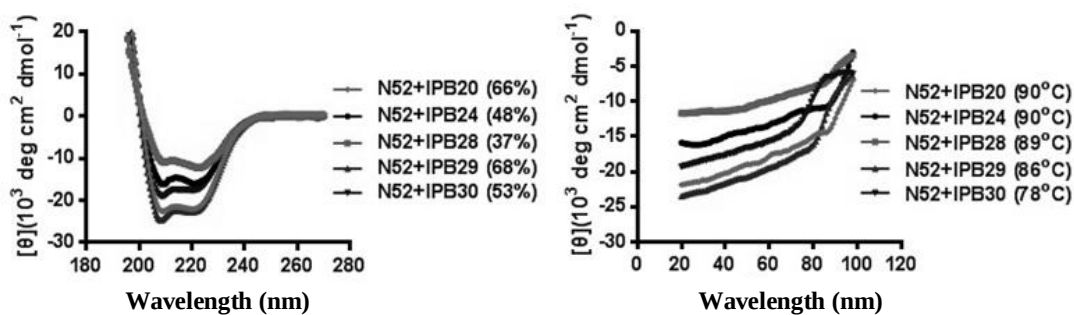


FIG. 2

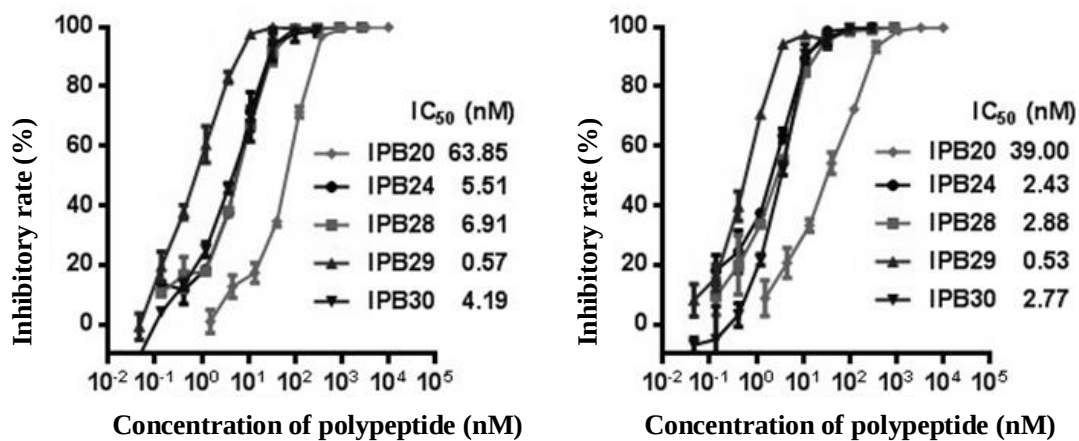


FIG. 3

SARS-CoV-2	IC ₅₀ (nM)			
	IPB24	IPB28	IPB29	IPB30
WT	5.51 ± 0.27	6.91 ± 0.21	0.57 ± 0.004	4.19 ± 0.05
D614G	6.17 ± 0.02	7.26 ± 0.05	0.77 ± 0.05	4.57 ± 0.16
K417N	6.04 ± 0.01	6.49 ± 0.09	1.10 ± 0.06	4.07 ± 0.02
E484K	5.61 ± 0.17	8.46 ± 0.39	0.97 ± 0.03	3.91 ± 0.06
N501Y	5.24 ± 0.54	6.11 ± 0.18	1.25 ± 0.01	3.50 ± 0.26
P681R	4.31 ± 0.22	4.54 ± 0.32	0.79 ± 0.01	3.93 ± 0.15
N501Y/69-70	4.96 ± 0.10	6.12 ± 0.07	1.20 ± 0.13	5.56 ± 0.12
N501Y/P681H	3.84 ± 0.13	5.68 ± 0.40	1.01 ± 0.10	3.84 ± 0.19
Alpha	5.94 ± 0.10	6.12 ± 0.21	1.13 ± 0.04	3.11 ± 0.02
Beta	5.65 ± 0.01	5.75 ± 0.16	0.89 ± 0.00	2.41 ± 0.27
Gamma	6.41 ± 0.09	5.45 ± 0.02	0.53 ± 0.05	2.97 ± 0.23
Delta	4.94 ± 0.03	6.30 ± 0.47	0.79 ± 0.02	3.57 ± 0.28
Lamda	6.57 ± 0.01	7.86 ± 0.35	1.14 ± 0.02	4.81 ± 0.09
Omicron	4.51 ± 0.15	4.51 ± 0.19	0.47 ± 0.03	1.78 ± 0.09

FIG. 4

SARS-CoV-2	IC ₅₀ (nM)			
	IPB24	IPB28	IPB29	IPB30
WT	2.43 ± 0.07	2.88 ± 0.05	0.53 ± 0.00	2.77 ± 0.12
D614G	3.15 ± 0.06	4.23 ± 0.17	0.74 ± 0.07	2.47 ± 0.10
K417N	3.93 ± 0.84	5.33 ± 0.43	1.30 ± 0.25	1.78 ± 0.27
E484K	4.84 ± 0.13	5.98 ± 0.04	0.99 ± 0.16	2.40 ± 0.48
N501Y	3.47 ± 0.57	5.03 ± 0.03	0.97 ± 0.07	2.12 ± 0.03
P681R	2.09 ± 0.09	3.71 ± 0.19	0.75 ± 0.08	1.95 ± 0.17
N501Y/69-70	4.50 ± 0.47	5.34 ± 0.54	1.03 ± 0.01	3.37 ± 0.06
N501Y/P681H	2.48 ± 0.11	4.55 ± 0.31	0.83 ± 0.06	2.41 ± 0.64
Alpha	5.42 ± 0.30	4.29 ± 0.39	0.73 ± 0.10	2.05 ± 0.07
Beta	3.29 ± 0.757	4.21 ± 0.26	0.65 ± 0.16	1.90 ± 0.10
Gamma	3.95 ± 0.72	3.89 ± 0.28	0.57 ± 0.002	2.31 ± 0.47
Delta	3.46 ± 0.13	4.34 ± 0.23	0.56 ± 0.05	2.17 ± 0.01
Lamda	4.10 ± 0.69	5.36 ± 1.37	0.86 ± 0.10	3.45 ± 0.16
Omicron	2.56 ± 0.47	2.46 ± 0.24	0.46 ± 0.02	1.46 ± 0.09

FIG. 5

Coronavirus	Target cell	IC ₅₀ (nM)			
		IPB24	IPB28	IPB29	IPB30
bat RaTG13	293T/ACE2	5.08 ± 1.37	4.94 ± 1.97	1.23 ± 0.56	2.33 ± 0.79
PCoV-GD	293T/ACE2	7.92 ± 0.38	7.10 ± 0.03	1.35 ± 0.11	7.30 ± 0.62
PCoV-GX	293T/ACE2	5.83 ± 0.28	5.15 ± 1.04	1.25 ± 0.26	6.76 ± 1.28
SARS-CoV	Huh-7	18.81 ± 1.27	18.69 ± 3.98	6.17 ± 0.57	65.29 ± 0.44
MERS-CoV	Huh-7	70.36 ± 7.96	140.36 ± 49.23	100.32 ± 17.70	719.73 ± 30.50
HCoV-NL63	Huh-7	186.97 ± 49.45	304.93 ± 38.94	80.78 ± 8.81	712.77 ± 17.40
HCoV-229E	Huh-7	287.97 ± 54.82	748.35 ± 19.63	309.30 ± 12.63	2054.17 ± 109.13

FIG. 6

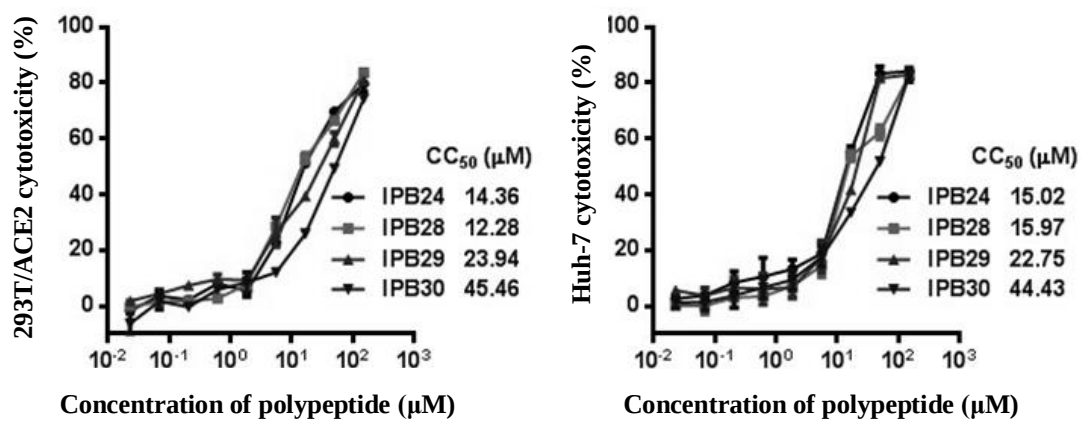


FIG. 7

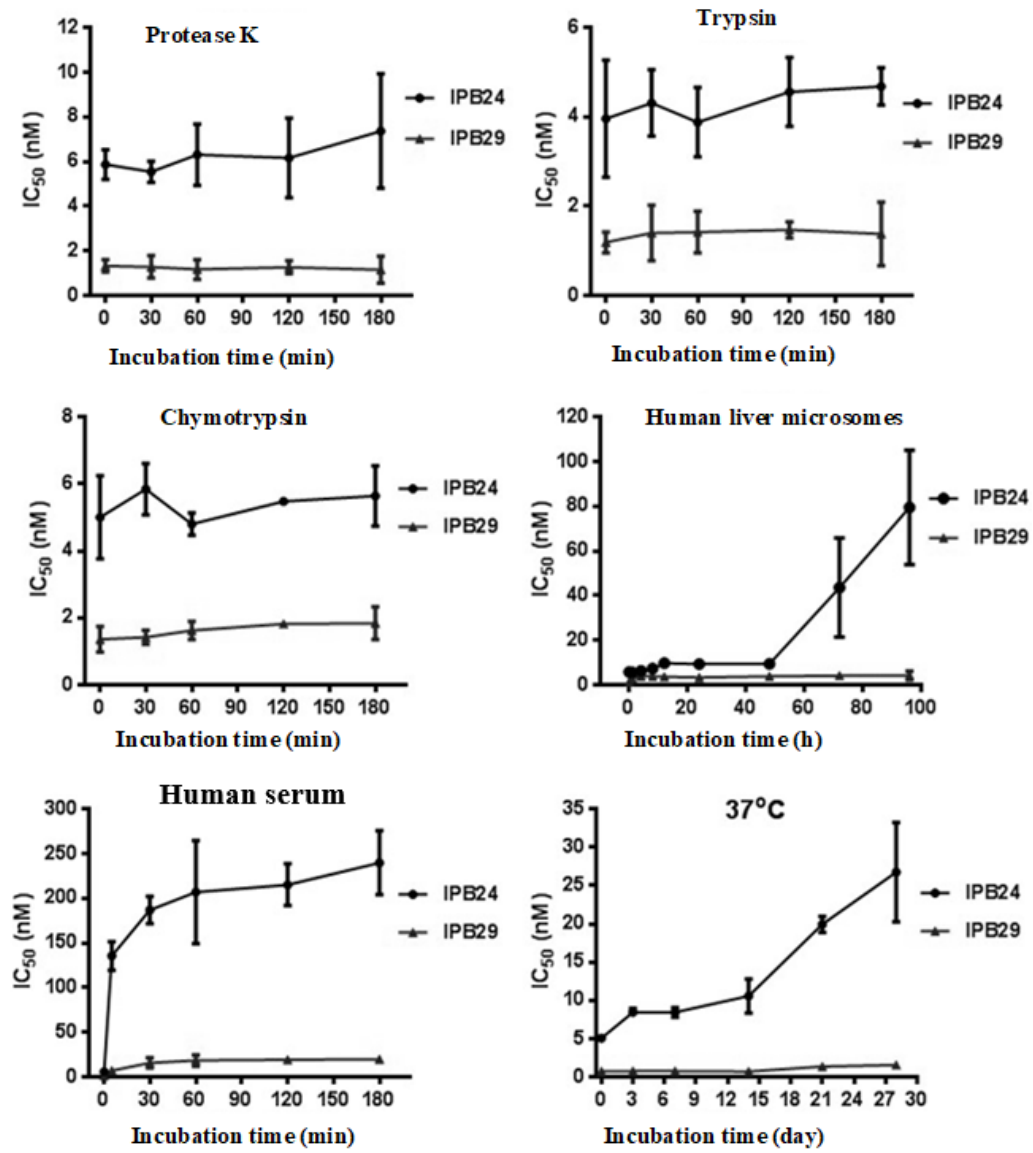


FIG. 8

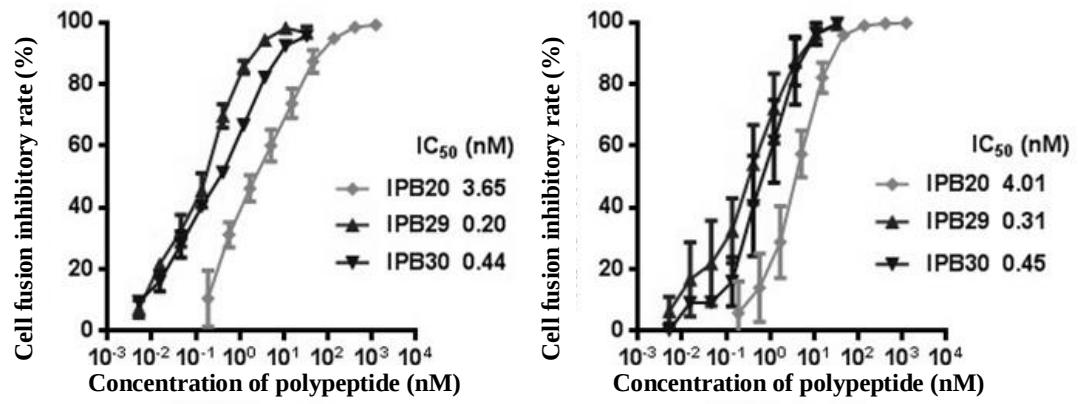


FIG. 9