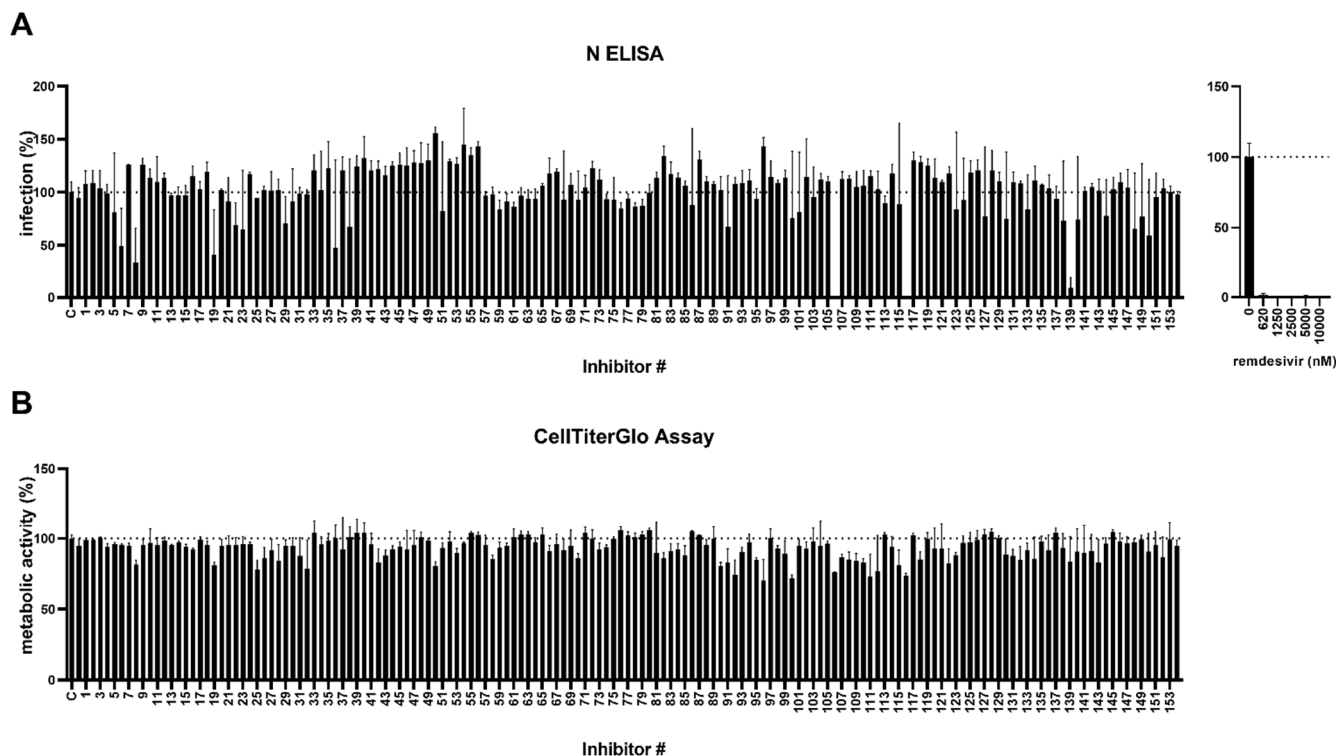
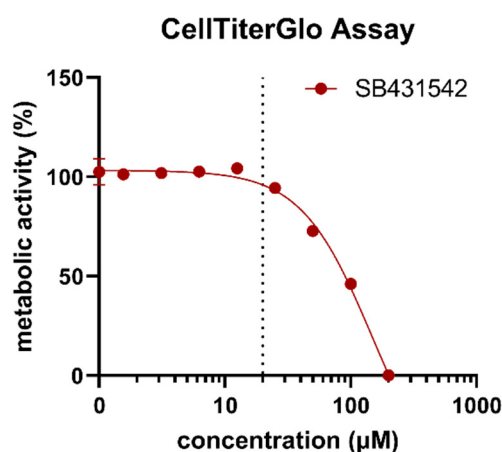


## Supplementary Materials



**Supplementary Figure S1. Screening of kinase inhibitors against SARS-CoV-2.** (a) Compounds were prediluted in medium and added onto Caco-2 cells (final conc. 1  $\mu$ M). Additionally, a titration series of the control inhibitor remdesivir was applied. Then, cells were infected with SARS-CoV-2 Alpha at a MOI of 0.0005. Two days later, infection was quantified by an in-cell ELISA which enzymatically quantifies nucleocapsid protein. Values were corrected for the background signal derived from uninfected cells and untreated controls were set to 100% infection. (b) In parallel, a viability assay was performed under conditions corresponding to the respective infection assay. After two days, metabolic activity of the cells was analyzed using the CellTiter-Glo® Luminescent Cell Viability Assay. Untreated controls were set to 100% viability. Shown are means  $\pm$  SD from one experiment in triplicates.



**Supplementary Figure S2. SB431542 is cytotoxic at concentrations higher than 25  $\mu$ M.** Calu-3 cells were treated with SB431542. Metabolic activity was determined two days post infection by CellTiterGlo assay. Values were normalized to untreated controls. Data are derived from one experiment performed in triplicates and represent are mean values  $\pm$  SD. Dotted line indicates highest concentration used in infection experiments (see Figure 7).

**Supplementary Table S1: List of kinase inhibitors and corresponding targets used for screening**

#	Inhibitor	Target
1	TG003	CLK1 CLK4
2	PKC 412	Multiple Kinases
3	Doramapimod	p38 MAPK
4	Erlotinib	EGFR
5	PLX4032	B-RAF B-RAV600E
6	Phthalazinone pyrazole	Aurora A
7	AG-879	BMX
8	Torin 1	mTOR
9	BIBF 1120	FGFR PDGFR VEGFR
10	SMI-4a	PIMs
11	AS-703026	MEK1 MEK2
12	Chelerythrine (chloride)	PKC
13	R406	Syk
14	AZD 7762	Chk1 Chk2
15	Dasatinib	Abl LCK Src
16	GSK1059615	PI3K $\alpha$
17	Ruxolitinib	JAK1 JAK2
18	Necrostatin-1	RIPK1
19	INK128	mTOR
20	Bosutinib	Abl EPHB2 Src
21	Canertinib (hydrochloride)	EGFR
22	(R)-Crizotinib	ALK c-MET
23	SB-431542 (hydrate)	ALK5
24	PD 173074	FGFR1
25	PD 0325901	MEK
26	SB 203580	p38 MAPK
27	VX-702	p38 MAPK
28	Emodin	CK2

29	CHIR99021	GSK3 $\alpha$ GSK3 $\beta$
30	BIO	GSK3 $\alpha$ GSK3 $\beta$
31	Imatinib (mesylate)	Multiple Kinases
32	Sunitinib (malate)	FLK1 FLT3 PDGFR $\beta$
33	PP2	Fyn HCK LYN
34	3-Methyladenine	PI3K
35	Bisindolylmaleimide I	PKC
36	Bisindolylmaleimide V	S6K
37	D 4476	CK1
38	Gö 6983	PKC
39	H-9 (hydrochloride)	PKG
40	Indirubin-3'-monoxime	GSK3 $\beta$
41	NU 6102	Cdk1 Cdk2
42	KN-62	CAMKII
43	KN-93	CAMKII
44	CGP 57380	MNK1
45	(S)-Glycyl-H-1152 (hydrochloride)	ROCK-II
46	Bisindolylmaleimide IX (mesylate)	GSK3 PKC
47	SU6656	Yes
48	LY364947	ALK5
49	CAY10621	SPHK1
50	YM-201636	PIKfyve
51	ZM 447439	Aurora B
52	AS-041164	PI3K $\gamma$
53	NVP-AEW541 (hydrochloride)	IGF-1R
54	PP242	mTOR
55	ABT-869	PDGFR family VEGFR family
56	CAY10622	ROCK-I ROCK-II
57	17 $\beta$ -hydroxy Wortmannin	PI3K
58	CAY10626	mTOR PI3K $\alpha$

59	SU 6668	Aurora B
60	PHA-665752	c-Met
61	BX-912	PDK1
62	Vatalanib (hydrochloride)	VEGFR family
63	KRN 633	VEGFR family
64	LCK Inhibitor	LCK
65	BI-D1870	RSKs
66	CRT0066101 (hydrochloride)	PKD
67	GNE-7915	LRRK2
68	GNF-5	Bcr-Abl
69	BMS 345541 (trifluoroacetate salt)	IKK $\alpha$ IKK $\beta$
70	NVP-TAE226	FAK PYK2 $\beta$
71	AZ191	DYRK1B
72	Tie2 Kinase Inhibitor	Tie2
73	Afuresertib (hydrochloride)	PKB/Akt
74	GSK2334470	PDK1
75	JNK Inhibitor XVI	JNK1 JNK2 JNK3 JNKs
76	BI-6727	Plks
77	Syk Inhibitor II	Syk
78	PF-06463922	ALK
79	PF-562271 (besylate)	FAK
80	BMS-777607	Axl family Met family
81	URMC-099	LRRK2 MLKs
82	BGJ398	FGFR family
83	Mps1-IN-1	Mps1
84	WZ4003	NUAK1 NUAK2
85	MLCK Inhibitor Peptide 18	MLCK
86	AP26113	ALK
87	AZ 3146	Mps1
88	AZD 1208	PIMs
89	RPI-1	RET
90	LDN-211904	EphB3

91	BMS-5	LIMK1 LIMK2
92	TAS 120	FGFR family
93	Apatinib	VEGFR2
94	ARQ-092	PKB/Akt
95	LY2606368	Chk1
96	FRAX597	PAK1 PAK2 PAK3
97	KW 2449	Abl FLT3
98	UNC569	Axl family
99	XMD16-5	TNK2
100	VE-822	ATR
101	Tilfrinib	BRK/PTK6
102	AZD 0156	ATM
103	LOXO-101	Trk family
104	LOXO-195	Trk family
105	U-0126	MEK
106	Staurosporine	PKC
107	Y-27632 (hydrochloride)	ROCKs
108	Leelamine	PDK
109	PD 169316	p38 MAPK
110	TGX-221	PI3K p110 $\beta$
111	(S)-H-1152 (hydrochloride)	ROCKs
112	AS-605240	PI3K $\alpha,\beta,\delta,\gamma$ PI3K $\gamma$
113	JNJ-10198409	PDGFR
114	CAY10505	CK2
115	PI-103	DNA-PK mTOR PI3K
116	PIK-75 (hydrochloride)	PI3K p110 $\alpha$
117	Sphingosine Kinase Inhibitor 2	SPHK1
118	SC-1	Stem Cell Renewal
119	(R)-Roscovitine	CDKs
120	Sorafenib	Multiple Kinases
121	CAY10561	ERK2
122	PI3-Kinase $\alpha$ Inhibitor 2	PI3K $\alpha$
123	ML-9	Multiple Kinases
124	Erbstatin analog	EGFR

125	Kenpaullone	CDKs GSK3 $\beta$
126	Olomoucine	CDKs
127	AG-494	EGFR
128	AG-825	ErbB2
129	AG-1478	EGFR
130	SB-216763	GSK3
131	H-8 (hydrochloride)	PKA PKG
132	LFM-A13	BTK
133	SC-514	IKK $\beta$
134	RG-13022	EGFR
135	AG-490	JAK2
136	AG-183	EGFR
137	Lavendustin C	EGFR
138	GW 5074	Raf-1
139	5-Iodotubercidin	CK1 ERK2 PKC
140	SB 202190	p38 MAPK
141	CAY10571	p38 $\alpha$ MAPK
142	Nilotinib	Bcr-Abl
143	SP 600125	JNKs
144	H-89 (hydrochloride)	Multiple Kinases
145	HA-1077 (hydrochloride)	ROCK-II
146	AG-370	PDGFR
147	Wortmannin	PI3K Plk1 Plk3
148	AG-1296	PDGFR
149	WHI-P131	JAK3
150	CAY10574	Cdk9
151	CAY10576	IKK $\epsilon$
152	TWS119	GSK3 $\beta$
153	CAY10578	CK2
154	PD 184161	MEK1 MEK2