



Letter of Declaration

To whom it may concern,

We, HANGZHOU ALLTEST BIOTECH CO., LTD., located at #550, Yin Hai Street, Hangzhou Economic & Technological Development Area, Hangzhou -310018, P.R. China

Declare that:

Alltest SARS-CoV-2 Antigen Rapid Test (COVID-19 Antigen Rapid Test) is designated to detect the nucleocapsid protein (NP) of SARS-CoV-2 virus. Epitope of capture antibody and detection antibody used in Alltest SARS-CoV-2 Antigen Rapid Test (COVID-19 Antigen Rapid Test) is not in the mutation area. Thus, abovementioned SARS-CoV-2 variants with spike protein mutation and nucleocapsid protein mutation of Alpha(B.1.1.7), Beta(B.1.351), Gamma(P.1), Delta(B.1.617.2), Lambda(C.37), Zeta(P.2), Kappa(B.1.617.1), Eta(B.1.525), Iota(B.1.526), Epsilon(B.1.427), Theta(P.3), Omicron(B.1.1.529), Omicron(BA.1), Omicron(BA.2), Omicron(BA.3), Omicron XE, Omicron BA.4, Omicron BA.5 and Omicron BA.2.12.1 do not affect the detection performance of Alltest SARS-CoV-2 Antigen Rapid Test (COVID-19 Antigen Rapid Test).

Signature:

A handwritten signature in blue ink, appearing to read 'Kael Chen', with a horizontal line extending to the right.

R&D Manager: Kael Chen

Date: June 17th, 2022

Hangzhou Alltest Biotech CO., Ltd

Add: #550 Yin Hai Street, Hangzhou Economic and Technologic Development Area
310018, P.R China



WHO label	Pango lineage	GISAID clade/lineage	Neststrain clade	Spike protein mutations	Nucleocapsid protein mutations
Alpha	B.1.1.7	GRY, GR/501Y.V1	20I/501Y.V1, 20B/501Y.V1	del69/70, del144/144, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H	D3L, R203K, G204R, S235F
Beta	B.1.351	GH/501Y.V2	20H/501Y.V2	D80A, D215G, K417N, E484K, N501Y, D614G, A701V	T205I
Delta	B.1.617.2	G/452R.V3	21A/S:478K	T19R, G142D, E156G, del157/158, L452R, T478K, D614G, P681R, D950N	D63G, R203M, D377Y
Epsilon	B.1.427 & B.1.429	GH/452R.V1	20C/S.452R	S13I, W152C, L452R, D614G	T205I
Eta	B.1.525	G/484K.V3	20A/S484K	Q52R, A67V, del69/70, del144/144, E484K, D614G, Q677H, F888L	S2Y, del3/3, A12G, T205I



Gamma	P.1	GR/501Y.V3	20J/501Y.V3	L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G, H655Y, T1027I, V1176F	P80R, R203K, G204R
Kappa	B.1.617.1	G/452R.V3	21A/S:154K	L452R, E484Q, D614G, P681R, Q1071H	R203M, D377Y
Lambda	C.37	GR/452Q.V1	20D	G75V, T76I, R246N, del247/253, L452Q, F490S, D614G, T859N	P13L, R203K, G204R, G214C
Lota	B.1.526	GH	20C/S:484K	L5F, T95I, D253G, D614G	/
Omicron	B.1.1.529	GR/484A	21K	A67V, del69/70, T95I, G142D, del143/145, N211I, del212/212, G339D, S371L, S373P, K417N, N440K, G446S, T547K, D614G, H655Y, N679K,	P13L, del31/33, R203K, G204R



				P681H, N764K, D796Y, N856K, Q954H, N969K, L981F	
Theta	P.3	GR	20B/S:265C	E484K, N501Y, D614G, P681H, E1092K, H1101Y, V1176F	R203K, G204R
Zeta	P.2	GR	20B/S.484K	E484K, D614G, V1176F	A119S, R203K, G204R, M234I
Omicron	BA.1	n/a	n/a	A67V, del69/70, T95I, G142D, del143/145, N211I, del212/212, G339D, S371L, S373P, S375F, K477N, T478K, E484A, Q493R, Q496S, Q498R, N510Y, Y505H, T547K, D614G, H655Y, N679K,	P13L, del31/33, R203K, G204R



				P681H, N764K, D796Y, N856K, Q954H, N969K, L981F	
Omicron	BA.2	n/a	n/a	T95I, L24S, del25/27, G142D, V213G, G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, S477N, T478K, E484A, Q493R, Q498R, N510Y, Y505H, T547K, D614G, H655Y, N679K, P681H, N764K, D796Y, Q954H, N969K,	P13L, del31/33, R203K, G204R, S413R
Omicron	BA.3	n/a	n/a	A67V, del69/70, T95I, G142D, del143/145, N211I, del212/212, T478K, D614G, H655Y, N679K, P681H, N764K, D796Y, Q954H, N969K	P13L, del31/33, R203K, G204R, S413R



Omicron	BA.4	n/a	n/a	<p>T95I, L24S, del25/27, del69/70, G142D, V213G, G339D, S371F, S373P, S375F, T376A, D405N, K417N, N440K, L452R, S477N, T478K, E484A, F486V, Q498R, N510Y, Y505H, D614G, H655Y, N679K, P681H, D796Y, Q954H, N969K,</p>	<p>P13L, del31/33, P151S, R203K, G204R, S413R</p>
Omicron	BA.5	n/a	n/a	<p>T95I, L24S, del25/27, del69/70, G142D, V213G, G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, L452R, S477N, T478K, E484A, F486V, Q498R, N510Y, Y505H, D614G, H655Y,</p>	<p>P13L, del31/33, R203K, G204R, S413R</p>



				N679K, N764K, P681H, D796Y, Q954H, N969K,	
--	--	--	--	--	--