

Date: 29 Nov 2021

Reference : MRD211121/01

Dear Valued Customers,

We, Medical Innovation Ventures Sdn. Bhd. (MEDIVEN), verify that the performance of **ProDetect COVID-19 Antigen Rapid Test** kits is not affected by the currently circulating variants of SARS-CoV-2 found worldwide (Table 1).

Table 1: Variants of SARS-CoV-2

WHO Label	Lineage	Variants	Spike protein	Nucleocapsid protein
Alpha	B.1.1.7	VOC 202012/01	N501Y; A570D; D614G; P681H; T716I; S982A; D1118H; 69/70HV deletion; 144Y deletion	D3L; R203K; G204R; S235F
	B.1.1.7 with E484K	VOC-202102/02	E484K, N510Y, A570D, D614G, P681H, T716I, S982A, D1118H, 69/70 HV deletion; 144Y deletion	D3L, R203K, G204R, S235F, A398T
Beta	B.1.351	VOC-202012/02	D80A, D215G, K417N, E484K, N510Y, D614G, A710V	T205I
Gamma	P.1	VOC-202101/02	L18F, T20N, P26S, D138Y, R80S, K417T, E484K, N510Y, H655Y, T1027I	P80R
Zeta	P.2	VUI-202101/01	E484K	A119S, M234I
	A.23.1 with E484K	VUI-202102/01	R102I, F157L, V367F, E484K, Q613H, P681R	E92K, S202N
Eta	B.1.525	VUI-202102/03	Q52R, 69/70 HV deletion, 144Y deletion, E484K, Q677H, F888L	A12G
	B.1.1.318	VUI-202102/04	T95I, E484K, P681H, D796H	A208-209 delinsG
	B.1.324.1 with E484K	VUI-202103/01	E484K, S494P, N501Y, D614G, P681H, E1111K	M234I

Theta	P.3	VUI 202103/02	LGV141-143del, 484K, 501Y, D614G, P681H, E1029K, V1167F, H1101Y	R203K, G204R
Kappa	B.1.617.1 with E484Q	VUI 202104/01	L452R, E154K, E484Q, D614G, P681R, E1072K, K1073R	D3Y, R203M, D377Y
Delta	B.1.617.2	VOC 202104/02	G142D, T19R, D614G, R158G, T478K, L452R, P681R, D950N, E156del, F157del	D63G, R203M, D377Y
Omicron	B.1.1.529	VOC	A67V, 69-70del. T95I, G142D, 143- 145del, 211del, L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H, N764K, D796Y, N856K, Q954H, N969K and L981F.	P13L, del31-33, R203K, G204R.

ProDetect COVID-19 Antigen Rapid Test screens for COVID-19 infection by detecting the nucleocapsid protein of SARS-CoV-2. The performance of ProDetect COVID-19 Antigen Rapid Test is not affected by the various spike protein mutation and nucleocapsid protein mutation of SARS-CoV-2 because the epitopes of the capture antibody and detection antibody were not located at the mutation areas.

Thank you for your continued support of Mediven products. If you have any questions or comments, please do not hesitate to contact us.

MEDICAL INNOVATION VENTURES SDN. BHD



Lim Li Sze (Ph.D)
Operations Director