

MutaPLEX® Coronavirus real time RT-PCR kit (Immundiagnostik AG, cat. No. KG1926xx)

MutaPLEX® RespiroScreen 1 real time RT-PCR kit (Immundiagnostik AG, cat No. KG1927xx)

MutaPLEX® RespiroScreen 2 DIFF real time RT-PCR kit (Immundiagnostik AG, cat No. KG1928xx)

MutaPLEX® SC2 multi gene real time RT-PCR kit (Immundiagnostik AG, cat No. KG1930xx)

MutaPLEX® Coronavirus 4G real time RT-PCR kit (Immundiagnostik AG, cat. No. KG1936xx)

UPDATE 2021/11/26

Influence of mutations in the SARS-CoV-2 Spike protein gene on the detection:

In silico analysis by Immundiagnostik AG, analyzing the following spike protein gene mutations was performed on the available sequences in the global databases of gene bank (NCBI) and GISAID (EpiCov™).

The following mutations include the Variants of Concern / Variants of Interest:

VOC: B.1.1.7 [**Alpha**]*, B.1.351 [**Beta**], P.1/B.1.1.28 [**Gamma**], B.1.617.2 [**Delta**], AY.4.2 [**Delta**]

VOI: B.1.429 [**Epsilon**]*, B.1.427 [**Epsilon**]*, P.2 [**Zeta**]*, B.1.525 [**Eta**]*, P.3 [**Theta**]*, B.1.526 [**Iota**]*, B.1.617.1 [**Kappa**]*, C.37 [**Lambda**], B.1.621 [**Mu**], AY.4.2 [...], **B.1.1.529 [Omicron]**

*De-escalated variants by at least one of the following criteria: (1) the variant is no longer circulating, (2) the variant has been circulating for a long time without any impact on the overall epidemiological situation, (3) scientific evidence demonstrates that the variant is not associated with any concerning properties. (ecdc.europa.eu/en/covid-19/variants-concern)

SARS-CoV-2 Spike protein mutations:

L18F, H66D, A67V, Δ69/70, G75V, T76I, D80A, T95I, G142V, Δ141, Δ142, Δ143, Δ144, Y144F, Y145D, Δ157/158, Δ211, L212I, ins214EPE, D215G, Δ241/243, Δ247/253, P337S, F338L, G339D, V341I, F342L, A344S, A348S, N354D, A352S, S359N, V367F, N370S, S371L, A372T, A372S, S373P, S375F, F377L, K378N, K378R, P384L, T385A, T393P, V395I, D405V, E406Q, R408I, Q409E, Q414R, Q414A, Q414E, **K417N, K417T**, A435S, W436R, N439K, N440K, K444R, V445F, G446V, G446S, **L452R**, L452Q, Y453F, F456L, F456E, K458R, K458Q, E471Q, I472V, G476S, S477R, S477I, S477N, T478I, T478K, P479S, N481D, G482S, V483A, V483I, **E484K, E484Q, E484A**, G485S, F486S, F490S, Q493R, S494P, G496S, Q498R, P499R, **N501Y**, V503F, Y505C, Y508H, A520V, A520S, P521S, P521R, A522V, A522S, T547K, D614G, H655Y, G669S, Q677H, N679K, **P681H, P681R**, R683A, R685A, A701V, N764K, D796Y, F817P, N856K, A892P, A899P, A942P, Q949R, Q954H, N969K, L981F, K986P, V987P, D1118H, V1176F, N1187D

None of the listed mutations shows an impact on the sensitivity and specificity of the named real time RT-PCRs.

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Head of Molecular Biology:



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