Supplementary Figure 1: Analysis of plant and E. coli expressed SARS-CoV-2 nucleoprotein antigens.

(A) Coomassie blue SDS-PAGE gel and (B) Western blotting of plant-based rNP (2µg of concentration) (C) Coomassie-blue SDS-PAGE gel and (D) Western blotting of E. coli-based rNP (2µg of concentration).

Lines on the left indicated the molecular weight marker (protein ladder) in kDa. The arrows indicates the expected sizes for recombinant N protein derived from plant (48– kDa) and E. coli (~46 kDa). Lanes 1A and 1B were blotted with pooled negative sera, while Lanes 2A and 2B with serum samples positive for SARS-CoV-2 infection obtained from a patient in the convalescent phase.
Supplementary Figure 2: Optical density at 450 nm (OD450) for the detection of SARS-CoV-2-specific total antibodies, IgG and IgM by weeks after symptom onset.

(A) Plant-based rNP (B) E. coli-based rNP (C) SD Biosensor-Total Ab (D) EDI-IgG and (E) EDI-IgM ELISA assays. The grey line shows the calculated cut-off values by mean+3SD or range recommended by commercial assay. The red line shows the cut-off values recommended by ROC-curve. Green lines indicate median with interquartile ranges.
Duration of total antibody detection post symptom onset

Duration of IgG detection post symptom onset

Duration of IgM detection post symptom onset
The data set contain 286 samples for rNP Plant-, rNP E. coli-based and SD Biosensor-Total Ab assays; including 128 samples from 30 symptomatic COVID-19 patients and 158 samples from negative controls. For EDI – IgG and IgM ELISA assay 64 samples were analyzed; including 44 samples from 19 symptomatic COVID-19 patients and 20 samples from negative controls.

mean +3SD, mean optical density plus 3 fold of standard deviation

ROC, receiver operating characteristic