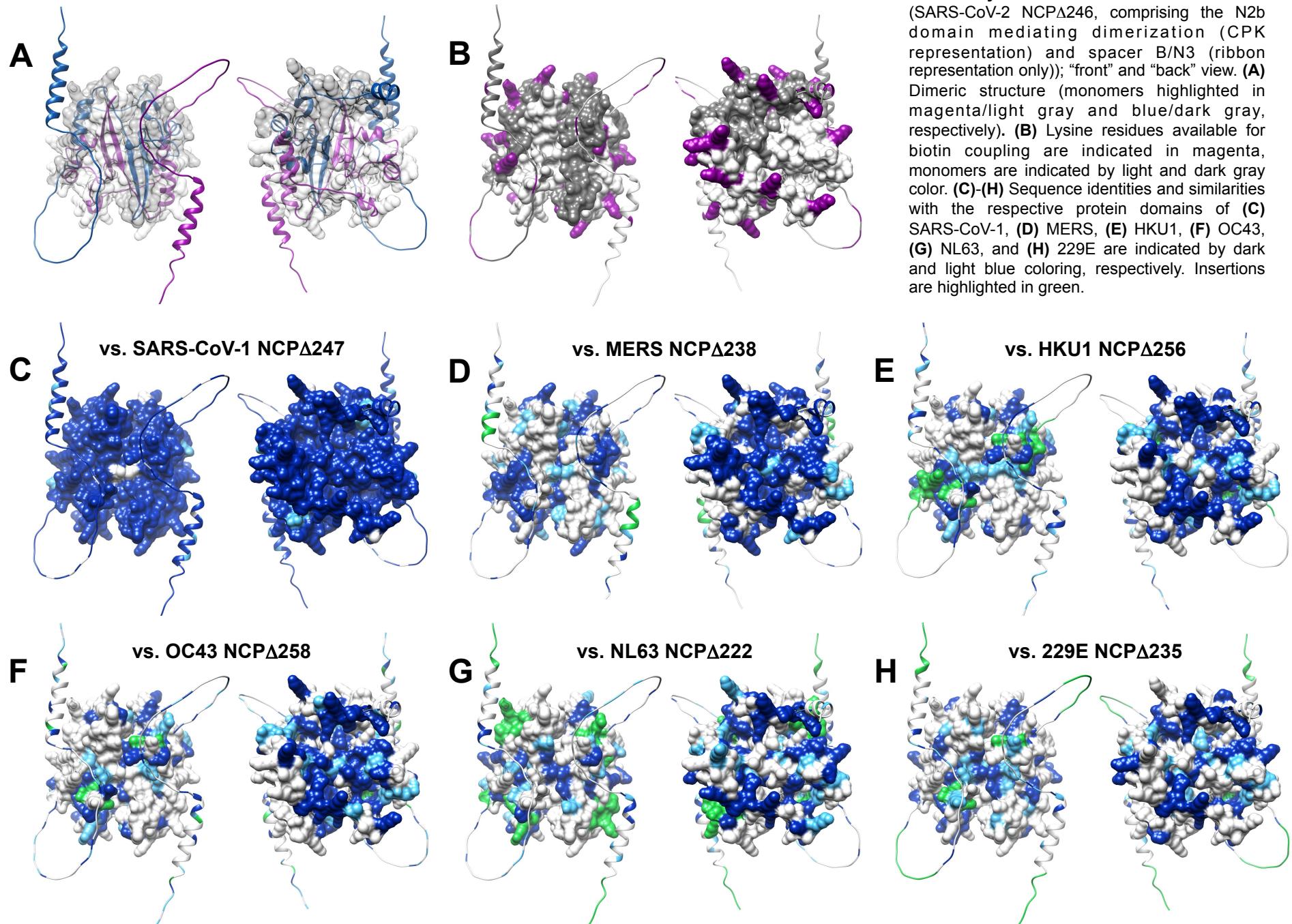
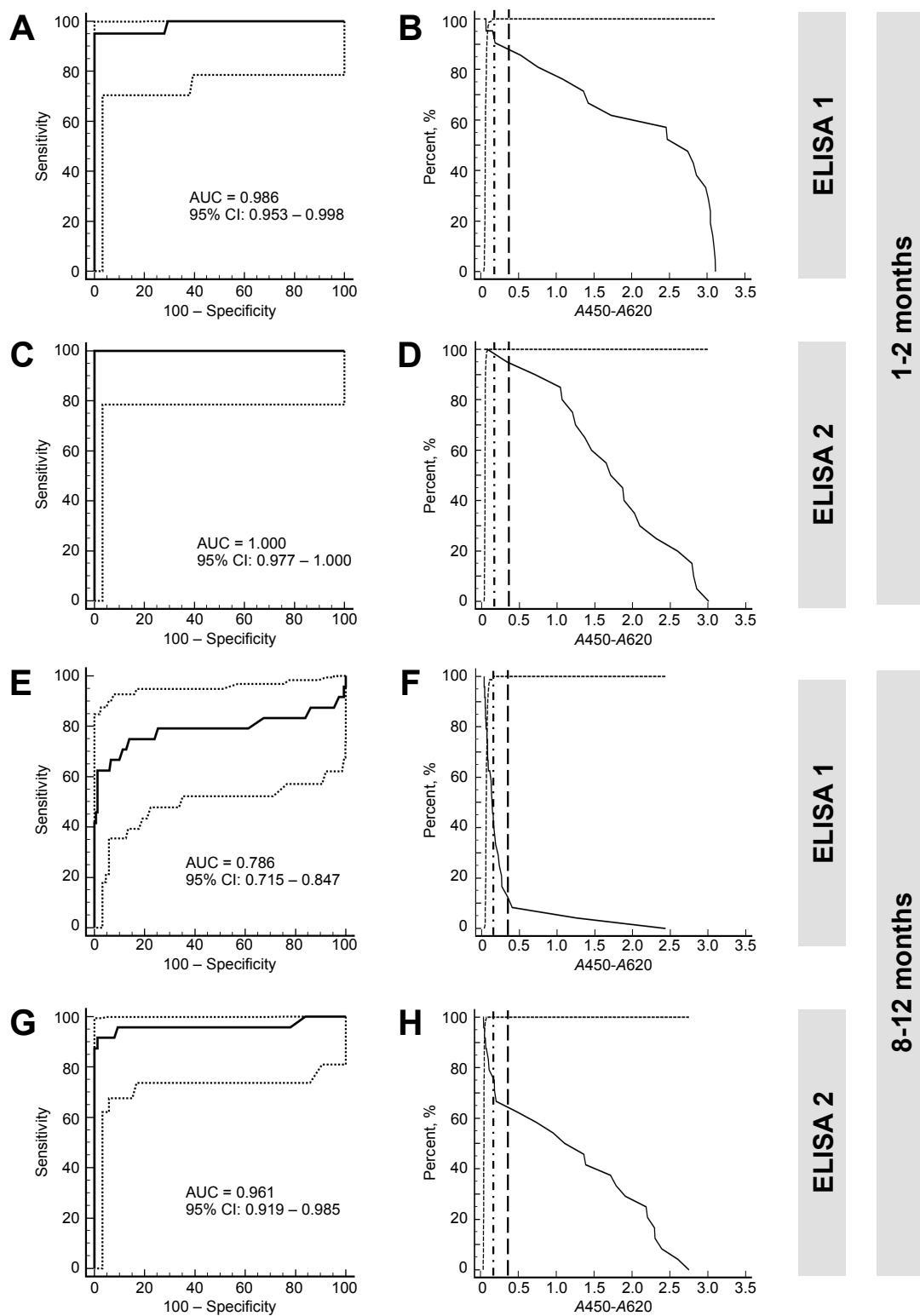


Supplemental Figure 1

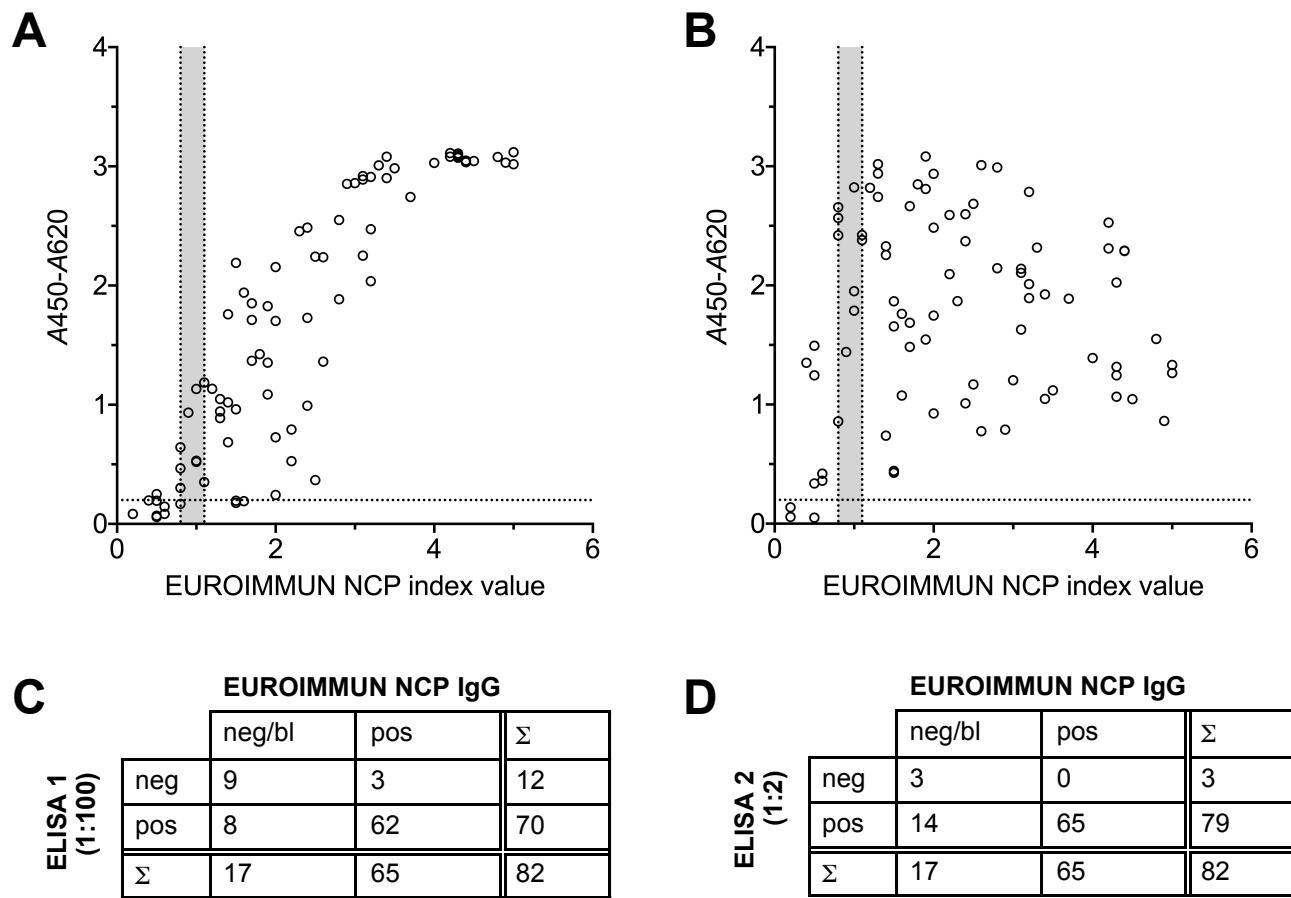


Supplemental Figure 2



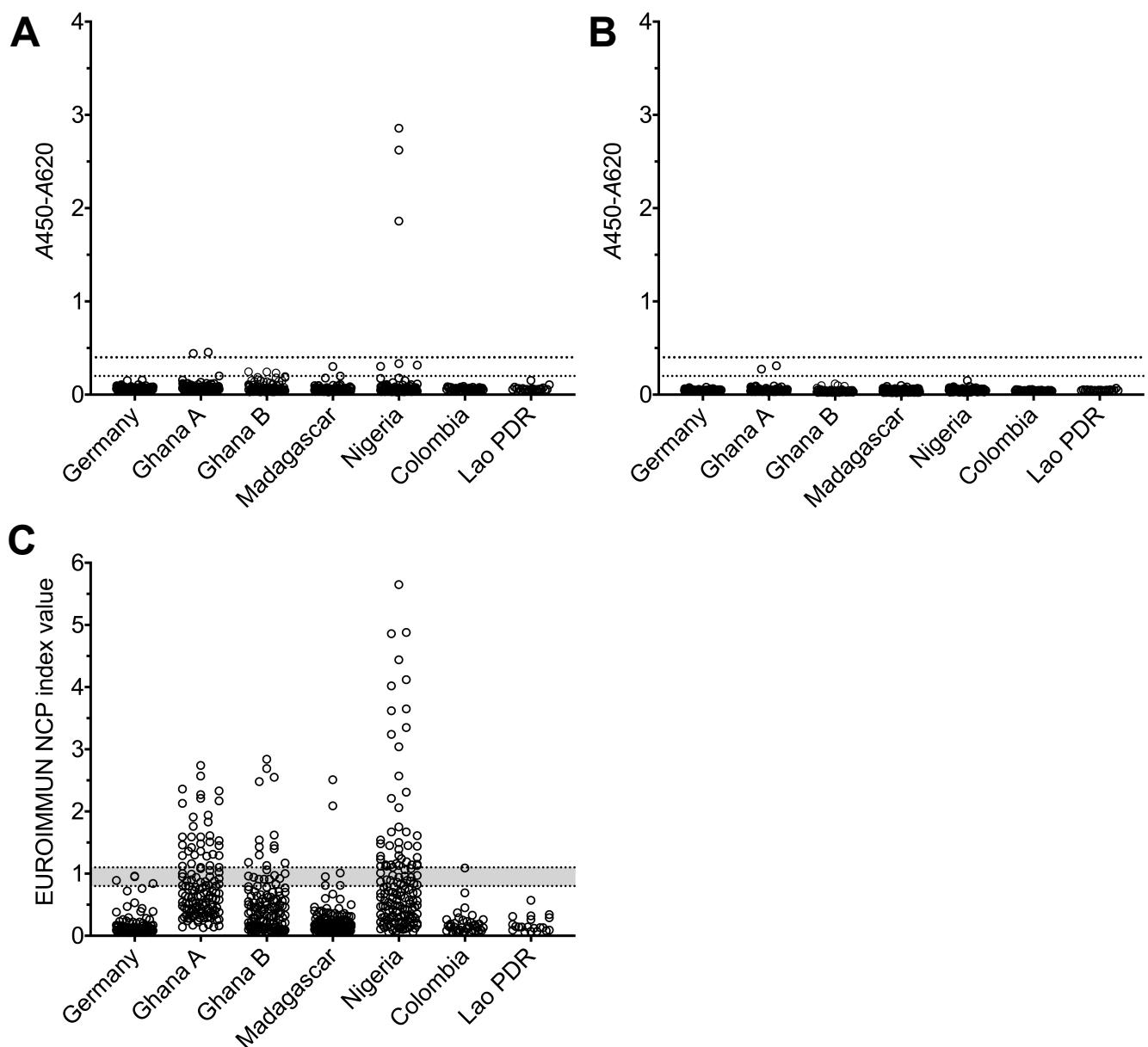
Supplemental Fig. 2: ROC analyses for ELISA 1 ((A), (B), (E), (F), sera 1:100, conjugate 1:20,000) and ELISA 2 ((C), (D), (G), (H), sera 1:2, conjugate 1:50,000) exemplified for COVID-19 patient samples collected 1-2 months ((A)-(D), n=21) and 8-12 months ((E)-(H), n=24) post onset of symptoms, respectively. Negative serum panel (collected before 2019): HD (healthy donors Europe, n=139). AUC: area under curve; gray line: 95% CI. (B), (D), (F), and (H): solid line: sensitivity (%), dotted line: specificity (%), dashed line: $A_{cutoff} = 0.2$ and $= 0.4$, respectively.

Supplemental Figure 3



Supplemental Fig. 3. Comparison to EUROIMMUN SARS-CoV-2 IgG NCP IgG ELISA. 82 SARS-CoV-2 IgG IIFT positive serum samples originating from 25 patients (dpo range: 10-178) were analyzed with the EUROIMMUN SARS-CoV-2 NCP IgG ELISA. **(A, C)** Comparison to SARS-CoV-2 Fc γ R IgG ELISA 1 results. **(B, D)** Comparison to SARS-CoV-2 Fc γ R IgG ELISA 2 results; bl: borderline. Dashed line indicates $A_{\text{cutoff}} = 0.2$; grey shaded area indicates EUROIMMUN assay borderline index values.

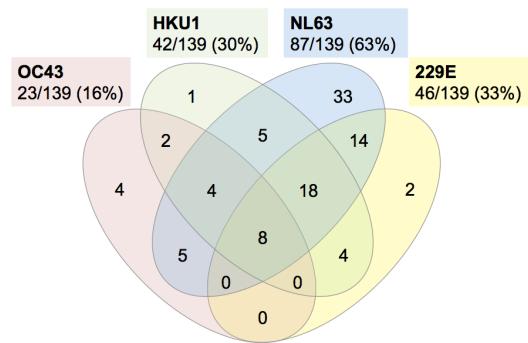
Supplemental Figure 4



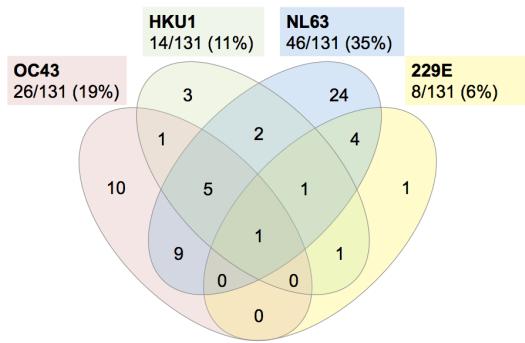
Supplemental Fig. 4. Specificity of SARS-CoV-2 IgG ELISAs. Serum/plasma panel collected from symptom-free donors before the SARS-CoV-2 pandemic in Europe (Germany: n=139), Africa (Ghana A: n=131; Ghana B: n=145; Madagascar: n=166; Nigeria: n=149), South America (Colombia: n=40), and Asia (Lao PDR: n=20) were analyzed with the SARS-CoV-2 IgG Fc γ R ELISAs 1 (**A**) and 2 (**B**) as well as with the EUROIMMUN SARS-CoV-2 NCP IgG ELISA (**C**). Dashed line in (A) and (B): $A_{\text{cutoff}} = 0.2$ and = 0.4, respectively. Grey shaded area in (C): index values classified as “borderline” according to the manufacturer’s instructions.

Supplemental Figure 5

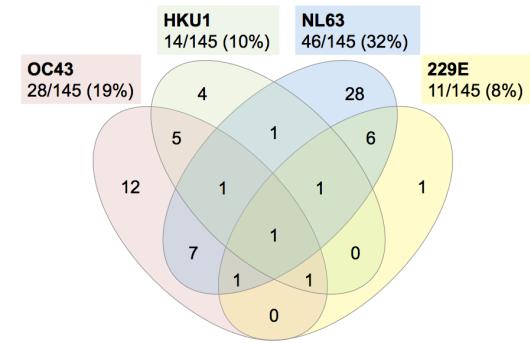
A Germany (β -CoV: 51/139 (37%))



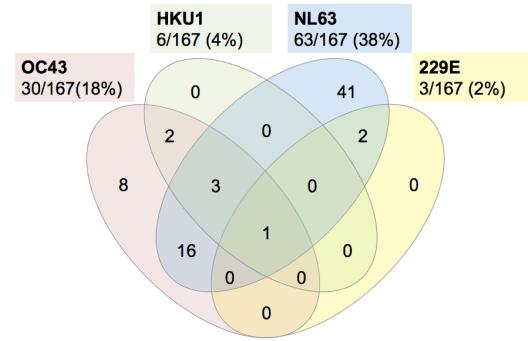
B Ghana A (β -CoV: 33/131 (25%))



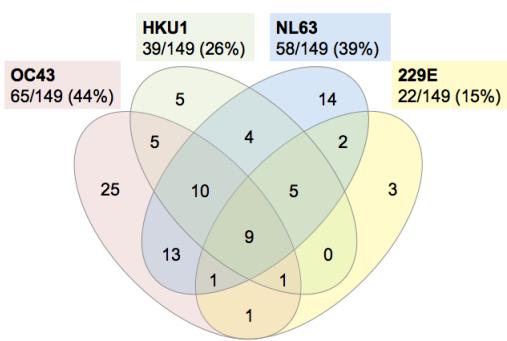
C Ghana B (β -CoV: 34/145 (23%))



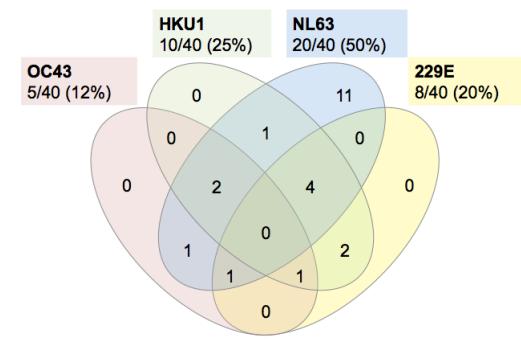
D Madagascar (β -CoV: 30/166 (18%))



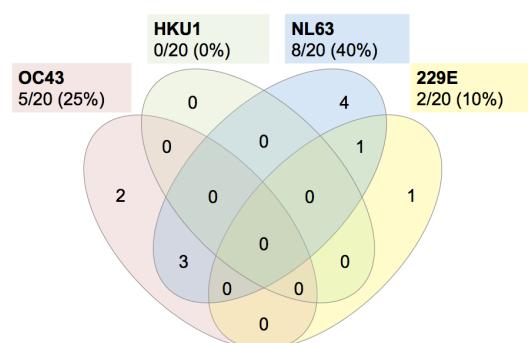
E Nigeria (β -CoV: 79/149 (53%))



F Colombia (β -CoV: 12/40 (30%))



G Lao PDR (β -CoV: 5/20 (25%))



Supplemental Fig. 5. Prevalence of IgG antibodies interacting with common cold CoV NCPs in pre-pandemic negative control serum/plasma panels. Antibodies were detected in serum panels from (A) Germany ($n=139$), (B, C) Ghana ($n_A=131$, $n_B=145$) (D) Madagascar ($n=166$), (E) Nigeria ($n=149$), (F) Colombia ($n=40$), and (G) Lao PDR ($n=20$) using an IgG Fc γ R ELISA protocol employing recombinant, truncated NCPs of OC43, HKU1, NL63, or 229E as antigen. In brackets following the country's name: fraction of samples positive for IgG antibodies interacting with one or both of the two common cold β -CoVs (OC43 and/or HKU1); boxes "OC43"/"HKU1"/"NL63"/"229E": fraction of samples positive for anti-OC43/HKU1/NL63/229E IgG antibodies, respectively. Venn diagrams visualize numbers of samples testing positive in the respective common cold CoV IgG Fc γ R ELISAs, e.g. 18 of the 139 German samples tested positive in the HKU1, NL63, and 229E ELISA, but negative in the OC43 ELISA.