Appendix Figures:

SARS-CoV-2 nucleocapsid protein undergoes phase separation with RNA and partitions with human hnRNPs

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Keywords: biomolecular condensates, intrinsically disordered proteins, liquid-liquid phase separation, heterogeneous nuclear ribonucleoproteins, RNA-binding proteins

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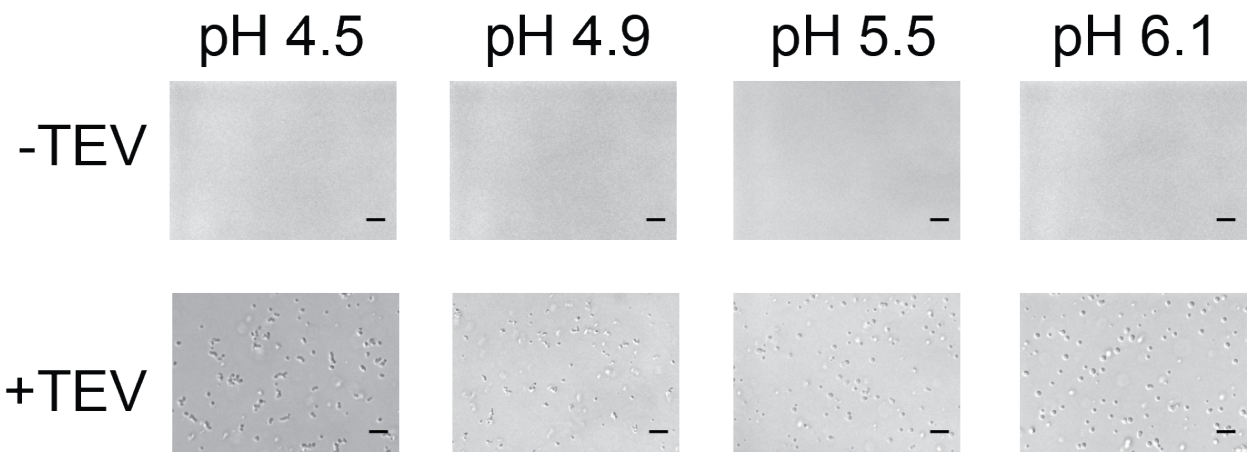
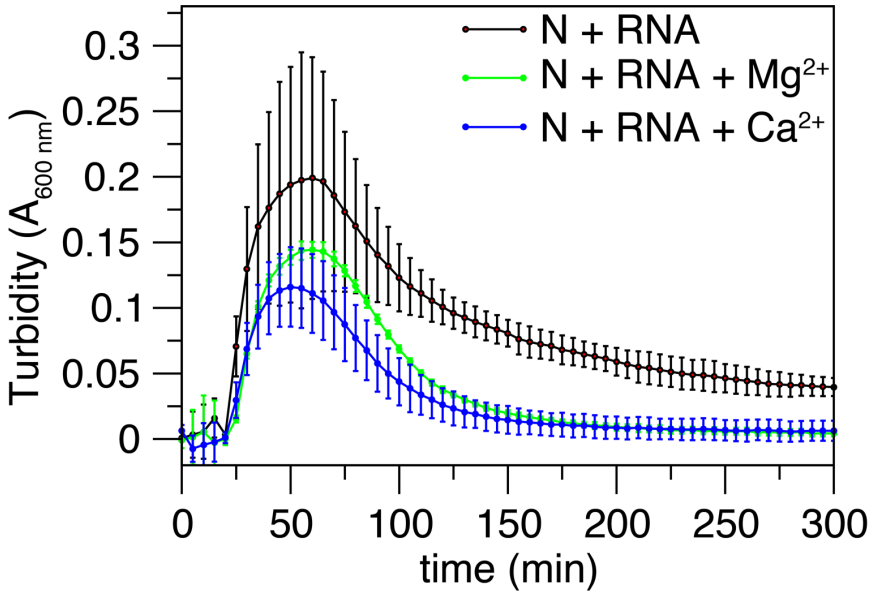
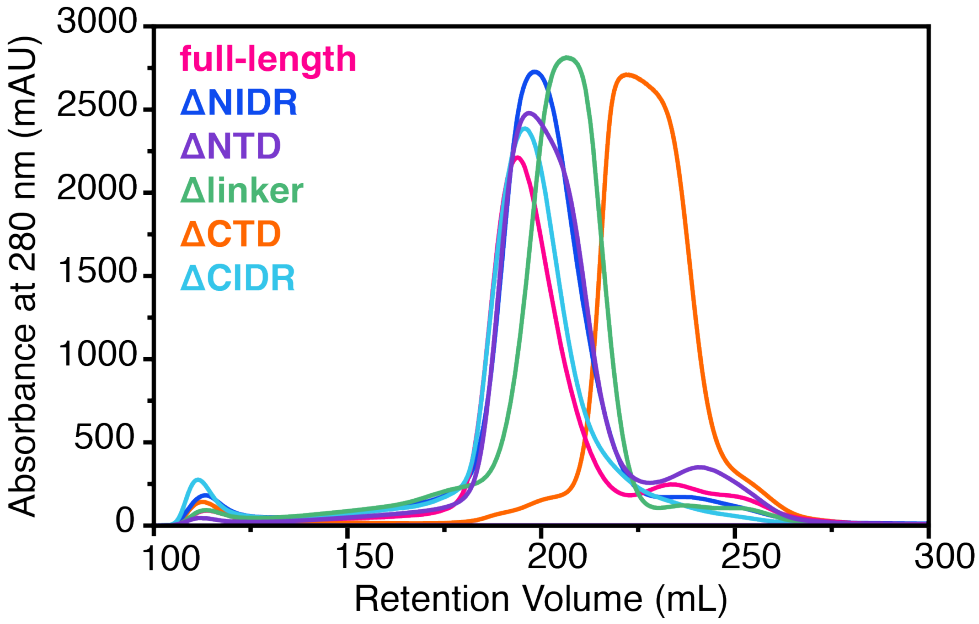


Appendix Figure S1: Low pH conditions induce aggregation of N in the presence of RNA. A) DIC micrographs of 50 μM N in varying pH conditions without and with TEV protease to cleave the MBP tag to initiate phase separation. At lower pH conditions, droplets appear to be non-spherical, consistent with less fluid behavior. Scale bars represent 50 μm.



Appendix Figure S2: Divalent metal salts do not substantially alter N LLPS. Addition of 2 mM $MgCl_2$ or $CaCl_2$ does not alter LLPS of 50 μM MBP-N in the presence of 0.5 mg/mL RNA in 50 mM Tris, 70 mM NaCl, pH 7.4 at room temperature. Error bars are standard deviation of three replicates.



Appendix Figure S3: Preparative scale gel filtration of N and N domain deletion variants. Elution times for samples injected on a HiLoad 26/600 Superdex 200 pg column equilibrated in 20 mM Tris, 1.0 M NaCl, pH 8.0.