

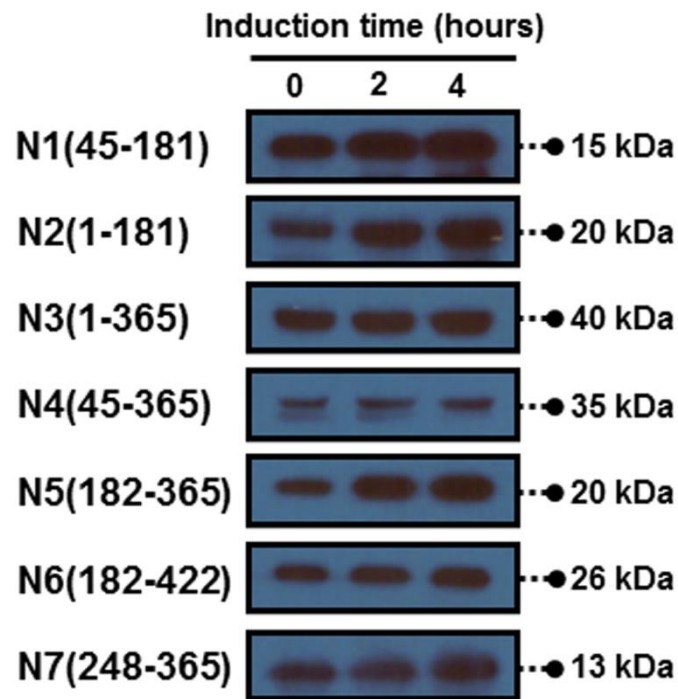
Supplementary Materials and Methods

Blue/White colony screening

X-gal/IPTG LB agar plates were produced by spreading 40 μ L of the 20 mg/mL X-Gal Solution (Chembio Co., Seoul, South of Korea) and 40 μ L of 100 mM IPTG Solution (Chembio Co., Seoul, South of Korea) on LB agar plates containing antibiotics. Transformed JM109 cells were inoculated onto these plates and incubated at 37°C for 16 hours. Images of colonies formed on each plate were captured using digital camera (EOS 100D, Canon Inc., Tokyo, Japan).

Western blot analysis

An approximately equal number of cells (OD₆₀₀ of 0.4) was harvested after 4 hours of IPTG induction, followed by centrifugation at 13,000rpm for 1 min. The pellet was resuspended with 80 μ L of sterile water and 20 μ L of sample buffer (60 mM Tris-HCl, 2% SDS, 25% glycerol, 0.1% bromophenol blue, 50 μ L β -mercaptoethanol). The sample was boiled for 10 min and centrifuged for 10 min at 4°C. Supernatants from each sample were resolved by SDS-polyacrylamide gel electrophoresis (SDS-PAGE) on 10%, 12% and 15% acrylamide gels and were electrophoretically blotted on to a nitrocellulose filter membrane prior to probing with appropriate antibodies. Antibodies used were two Rabbit anti-SARS-N polyclonal antibodies (Novus Biologicals, CO, USA) (Sino Biological Inc., Beijing, China), mouse anti- β -galactosidase polyclonal antibody (Promega Co., WI, USA), and mouse anti-alkaline phosphatase (ALP) monoclonal antibody (Chemicon international Inc., MA, USA). Either rabbit or anti-mouse IgG conjugate (Thermo Fisher Scientific, CA, USA) were used as secondary antibodies.



Supplementary Figure 1. Western blot results of various deletion constructs of SARS-CoV N-protein are as described in **Fig. 3A**. N1(44-181), N2(1-181), N3(1-365), N4(45-365), N5(182-365), N6(182-422) and N7(248-365) protein bands were detected with lysates obtained from transformed JM109s induced with 0.5 mM IPTG. The molecular weights of the truncated N-protein produced by each deletion construct are indicated on the right.