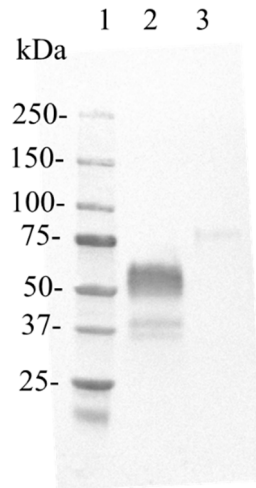


**Figure S1** N protein expression in HEK-293 cells in adherent conditions. The recombinant cells were seeded at  $0.3 \times 10^6$  cells per well in 1 mL of DMEM/F12-FBS in triplicate in 24-well plates. Six plates were seeded in the same conditions, one per each day of the kinetic study. Twenty-four hours later, the cell monolayer was carefully washed with PBS and 1 mL of DMEM/F12 medium was added per well. The plates were incubated again at 37 °C in 5% CO<sub>2</sub> and approximately every 24 hours, samples of cell culture were collected and cell density and viability were determined. **A:** Growth profile of HEK-293-N-100 cells and HEK-293-N-200 cells cultured in adherent conditions. **B:** N protein concentration in the cell culture supernatant determined by ELISA. **C** and **D:** SDS-PAGE 10 % and Western blot analysis under reducing conditions of cell culture supernatant collected approximately every 24 hours from HEK-293-N-100 cells and HEK-293-N-200 cells, respectively. SARS-CoV-2 N protein produced in *E. coli* was used as positive control (N). (PS): Precision Plus Protein™ All Blue Prestained Standard. The antibody CBSSNCoV-1-HRP (1:2000) was used for protein detection. Protein visualization was carried out using ECL detection system.



**Figure S2** Analysis by SDS-PAGE 10 % and Western blot of the SARS-CoV-2 N and N-CD proteins produced in HEK-293SF cells supernatant using 1 Lbioreactors. In the experiment performed in 1 L-bioreactors, HEK-293SF cells were transfected with linear PEI (MW 25,000) in HyCell TransFx-H medium. Seventy-two h post-transfection the cell culture supernatant was collected and analyzed. Lane 1: Precision Plus Protein™ All Blue Prestained Standard, lane 2: cell culture supernatant of cells transfected to express the N protein, lane 3: cell culture supernatant of cells transfected to express the N-CD protein. Equal volumes of 5-fold concentrated cell culture supernatant were loaded onto the SDS-PAGE gel under reducing conditions. Amicon® Ultra-2 mL centrifugal filters were used for concentration. A 6x-His Tag monoclonal antibody conjugated to horseradish peroxidase (HRP) (His.H8, MA1-21315-HRP, Thermo Fisher Scientific, USA) (1:1000) was used for the detection of the 6x-Histidine tail present in both proteins. Protein visualization was carried out through an ECL detection system.

Original photos for SDS-PAGE and western blots

Figure 1b

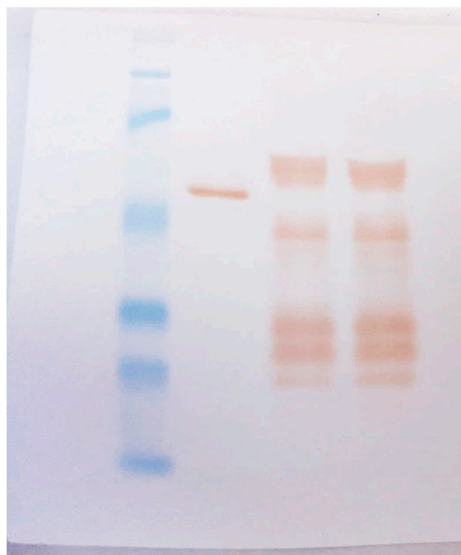


Figure 1c

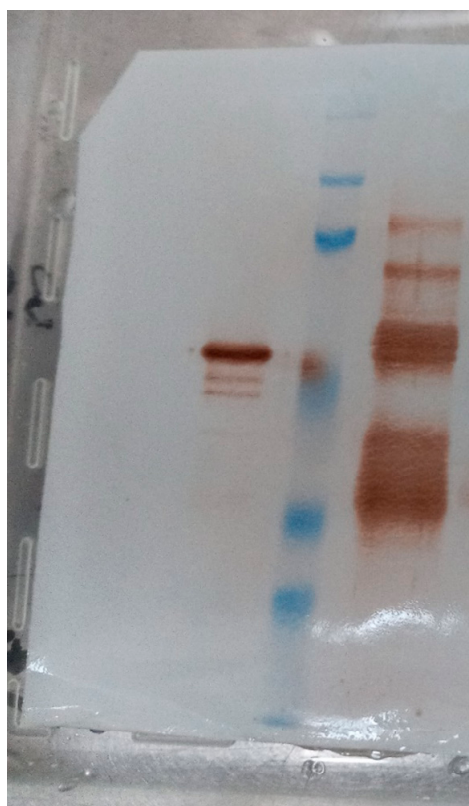


Figure 2a

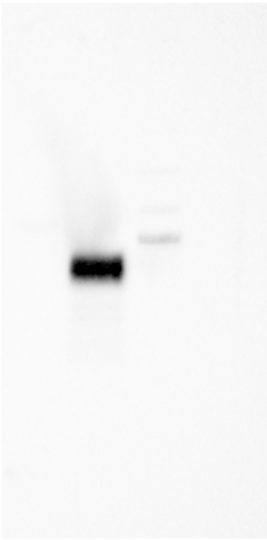


Figure 2b

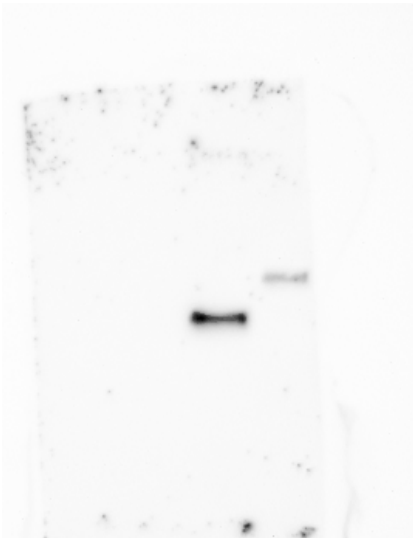


Figure 2c and Figure 3b

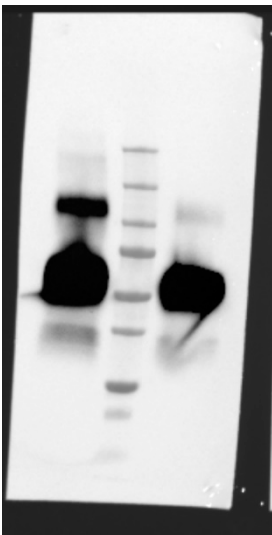


Figure 2d and Figure 3d

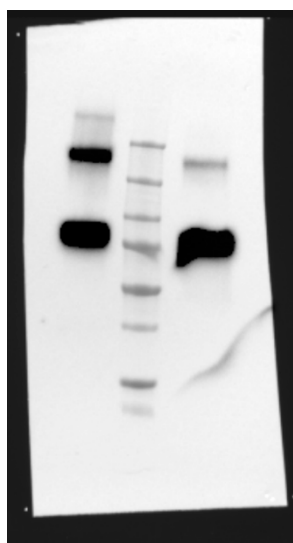


Figure 4c

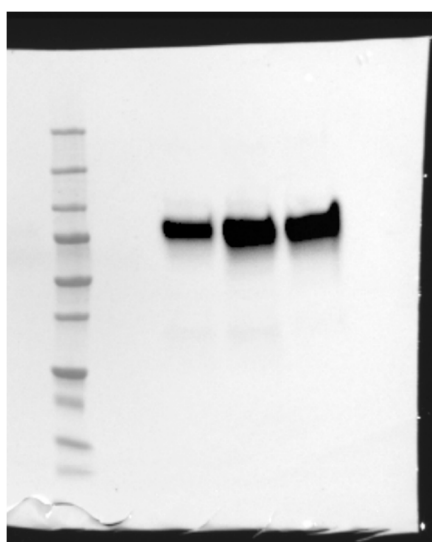


Figure 5a

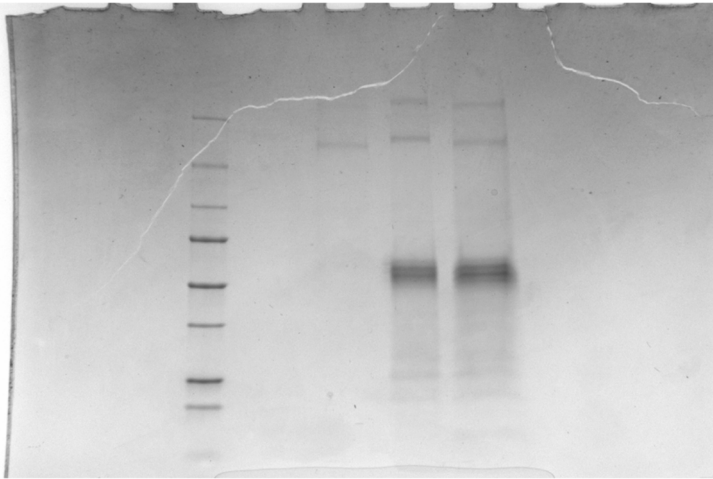


Figure 5b

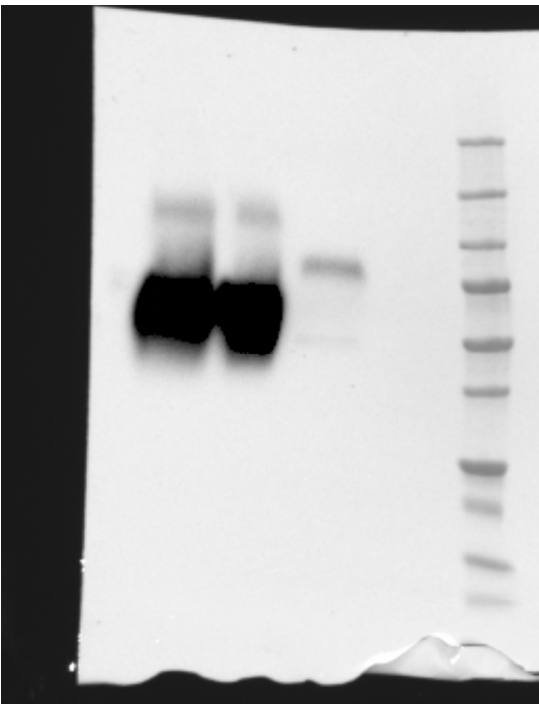


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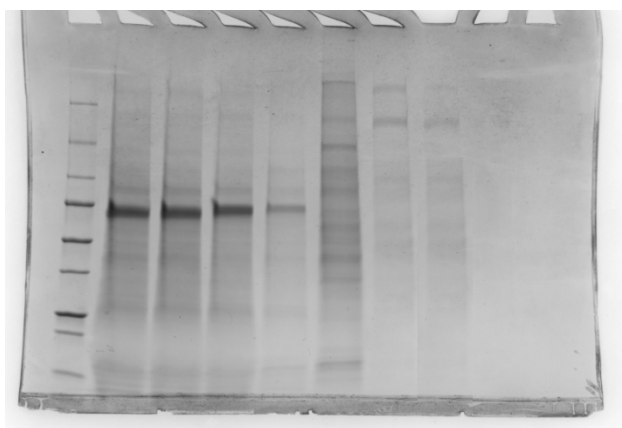


Figure 5d

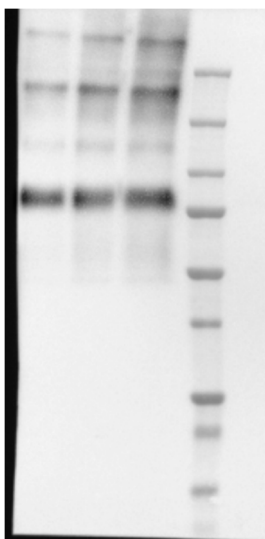


Figure 7d

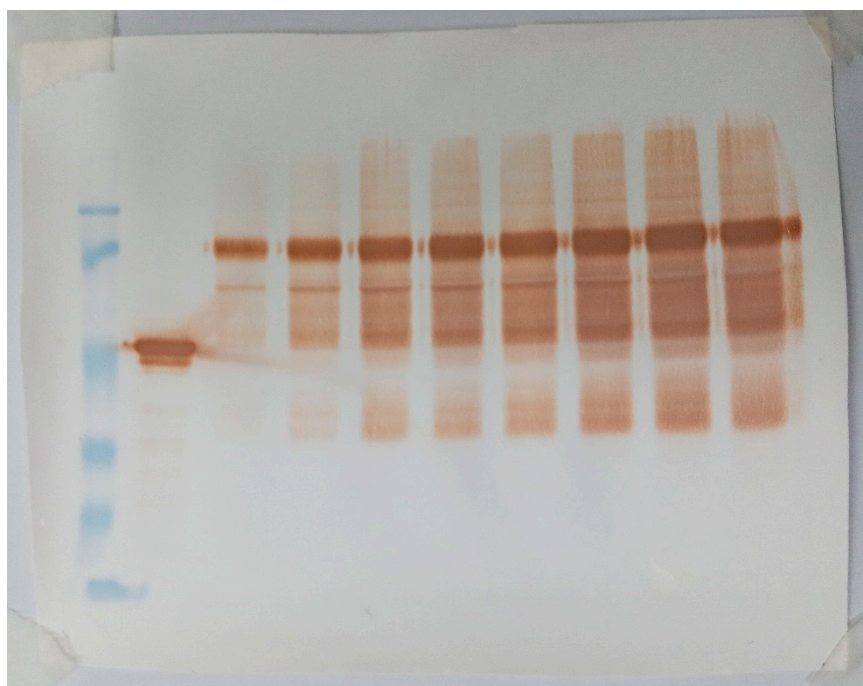


Figure 7e

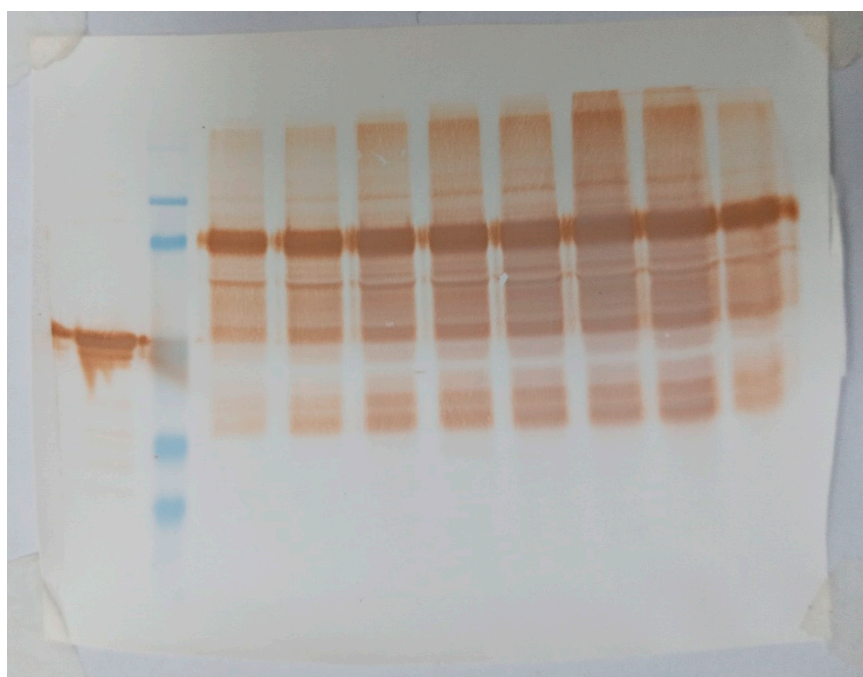




Figure 7f

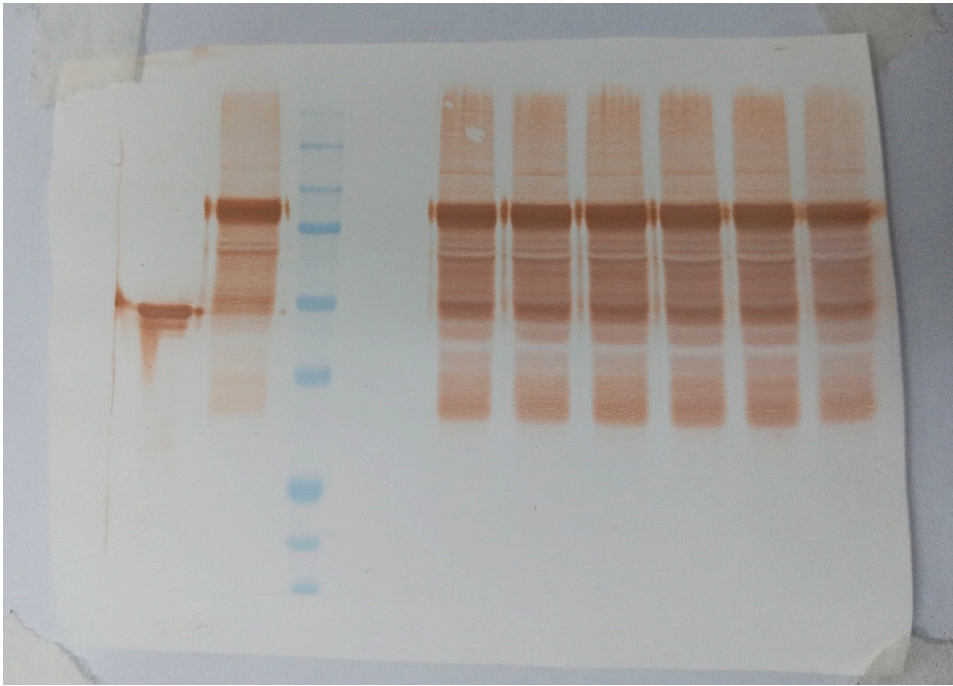


Figure 8b

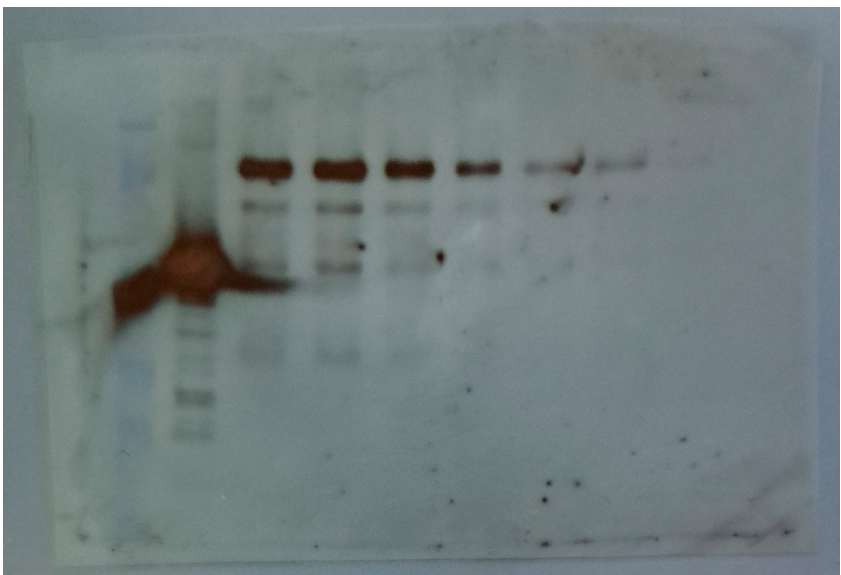


Figure 9b

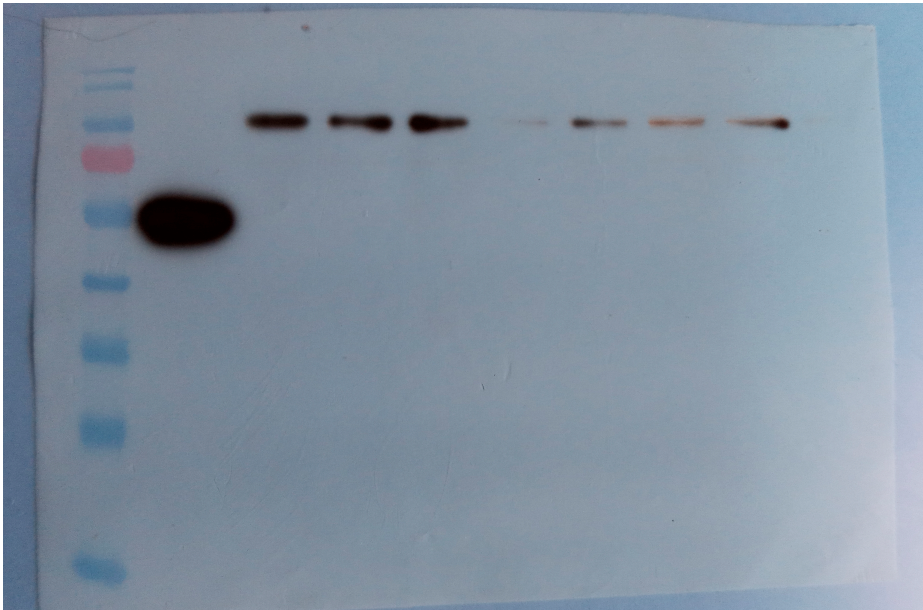


Figure 9c

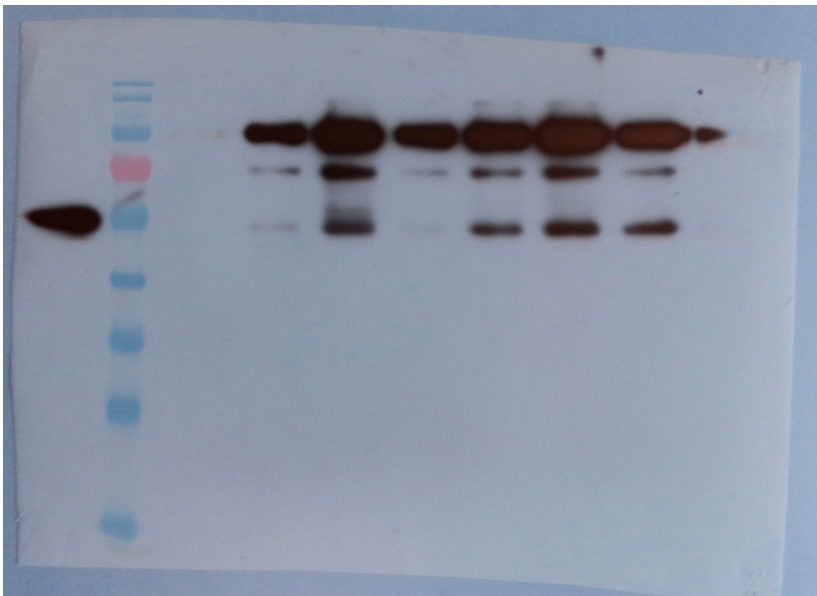


Figure S1c

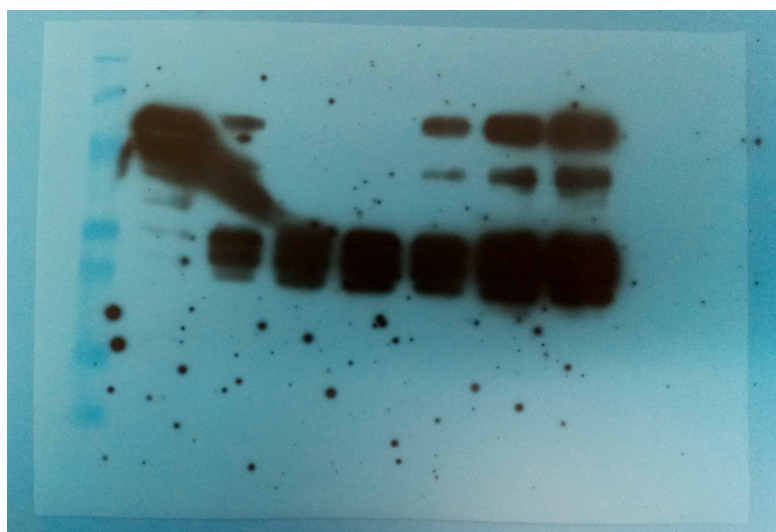


Figure S1d

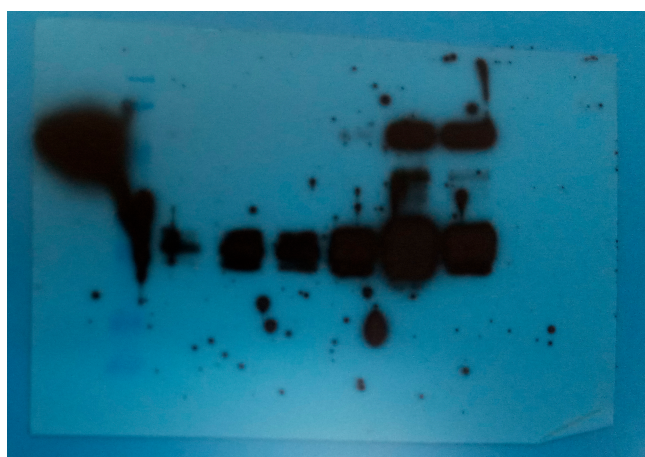


Figure S2

