Serial dilutions are made from patient serum and mixed with viral suspension. Concentration of the viral suspension remains constant.

Viral suspension

Virus and antibody-containing serum is allowed to incubate before being plated on monolayer host cells.

Over the course of several days, plaque forming units appear on the plate. Neutralizing capacity of the patient serum against the virus can be quantified.

Cell monolayer + viral suspension + serum is covered with agar and incubated for several days.

Dilution at which antibody concentration is able to reduce plaque formation by 50% is known as the PRNT$_{50}$. Indicates that antibodies exist in the patient that are able to neutralize further viral activity.