

Anti-Rubella virus capsid protein, mouse monoclonal antibody (RVC-01)

65-380 100 µg

Shipping and Storage: Shipped at 4°C or -20°C and store at -20°C.

Immunogen: Recombinant Rubella virus nucleocapsid protein (aa 1 to 277) expressed in *E. coli*.

Form: 1mg/ml in PBS- with 50% glycerol. Filter-sterilized.

Purity: Protein A purified IgG1 κ

Reactivity: Rubella virus capsid protein

Applications:

1. Western blotting: x1/500-1,000 (Fig.1)
2. Immunofluorescence: x1/500 (Fig.2)

Background: Rubella virus (RV) is a human pathogen that causes “German measles,” a relatively mild disease characterized by rashes and low-grade fever. However, due to its teratogenic properties, RV is a major threat to the fetus when infection occurs during the first trimester of pregnancy. RV is the sole member of *Rubivirus* genus in the *Togaviridae* family. RV has a single-stranded, positive-sense RNA genome. The genome encodes two open reading frames (ORFs): the 5'-proximal ORF encodes viral nonstructural proteins that are responsible for viral genome replication, while the 3'-proximal ORF encodes three virion structural proteins, the capsid protein (CP, ~35 kDa), and the two envelope glycoproteins, E2 (58-59 kDa) and E1 (42-48 kDa). The CP interacts with the RNA genome and forms the nucleocapsid (aa 277).

Data Link: UniProtKB: [P08563](#) · POLS_RUBVM (M33 strain)
[P07566](#) · POLS_RUBVT (Therien strain)

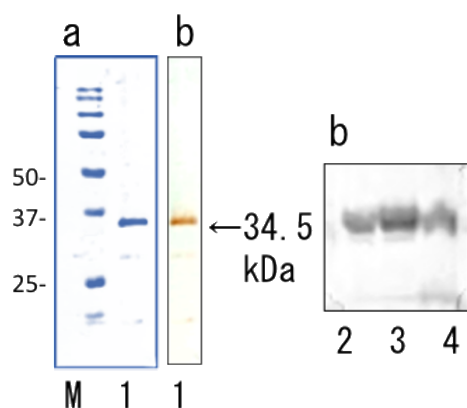


Fig.1. Western blot (WB) of RVC-01 antibody.

The recombinant RV CP and the lysates of RV-infected VeroE6 cells were applied to SDS-PAGE (a) and WB (b): (M) Marker, (1) recombinant RV CP, (2) RV Matsuura strain genotype 1a, (3) RV genotype 1E, (4) RV genotype 2B. The RVC-01 antibody was used at 1/500 dilution. The HRP-conjugated goat anti-mouse IgG was used at 1/4,000 as the second antibody. A 34.5kDa band was identified as RV CP.

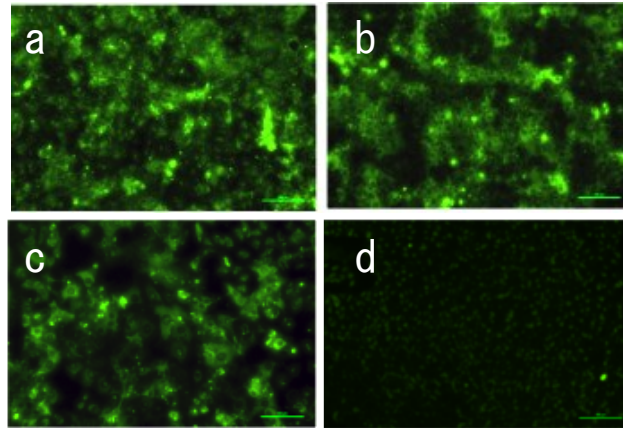


Fig.2. Immunofluorescence staining of RV CP in RV-infected cells (Vero E6).

MV-infected and uninfected cells on a slide glass were fixed with ethanol. (a) RV (genotype 2B)-infected cells, (b) RV (genotype 1E)-infected cells, (c) RV (genotype 1a)-infected cells, (d) uninfected cells. The RVC-01 antibody was used at 1/500 dilution. The FITC-conjugated goat anti-mouse IgG was used at 1/4,000 as the second antibody.

Reference: This antibody has not yet been used in publication.

Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.