

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

Product code	65-380
Size	100 µg
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS ⁻ with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium.
Immunogen	Recombinant Rubella virus nucleocapsid protein (aa 1 to 277) expressed in <i>E. coli</i> .
Isotype	Mouse IgG1κ
Reactivity	Rubella virus capsid protein
Special notes	N/A
Application	1. Western blotting: 1/500-1/1,000 (Fig.1) 2. Immunofluorescence: 1/500 (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 <i>Rubivirus</i> 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)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 65-380 Anti-Rubella virus capsid protein antibody, mouse monoclonal (RVC-01)

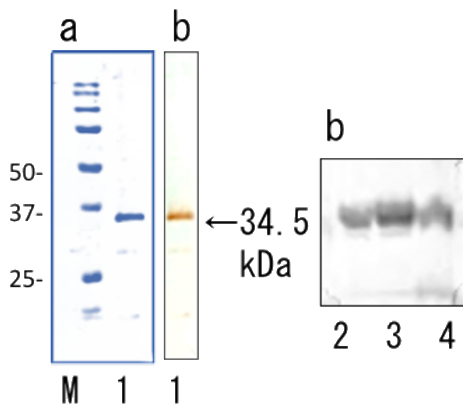


Fig.1. Western blot (WB) of RVC-01 antibody.

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.

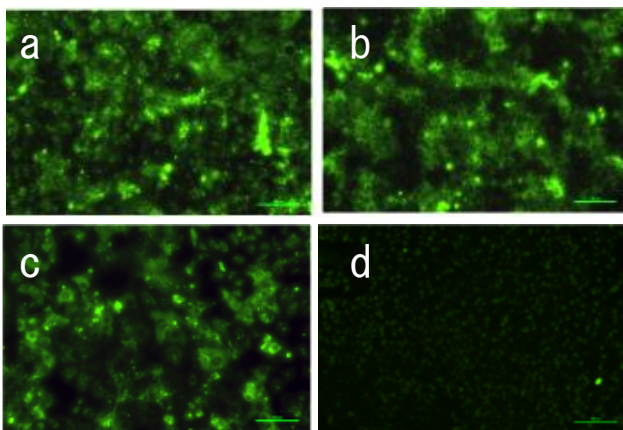


Fig.2. Immunofluorescence staining of RV CP in RV-infected cells (Vero E6).

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.