Anti-Cowpox virus (A-type inclusions) antibody, mouse monoclonal (ATI-01)

Product code	65-043
Size	50μg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A
Immunogen	Lysate of RK13 cells infected with cowpox virus (LB red strain)
Isotype	mouse IgG1κ
Reactivity	Reacts with A-type inclusions of cowpox virus and ectromelia virus, but not react with vaccinia virus
Validation	Specificity has been validated by western blotting (Fig.1) and immunofluorescence (Fig. 2)
Application	1.Western blotting: x1/400-800 (Fig.1) 2.Immunofluorescence: x1/400 (Fig.2)
Background	The poxviruses (family Poxviridae) are a family of double-stranded DNA (dsDNA) viruses with very large genomes (130–360 kb in length), usually encoding more than 150 genes per genome. The Poxviridae are divided into two subfamilies: Entomopoxvirinae, infecting insects; and Chordopoxvirinae, infecting vertebrates. Some poxviruses form large inclusions called A-type inclusions (ATIs) in the cytoplasm in which mature virions are embedded. Some species including cowpox virus (CPV), ectromelia virus, volepox virus and raccoon poxvirus form ATIs, whereas others such as monkeypox virus, variola virus, vaccinia virus (VV) and horsepox virus do not. ATIs are composed of multiple copies of a single viral polypeptide (ATI protein). ATI protein is a large protein (160 kDa in CPV) containing C-terminal, hydrophobic repeats that are required for assembly of inclusion bodies. ATIs are localized throughout the cytoplasm and increase in size during infection
Data Link	**UniProtKB:** P16602・ATI_COWPOX

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

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Data Images: 65-043 Anti-Cowpox virus (A-type inclusions) antibody, mouse monoclonal (ATI-01)

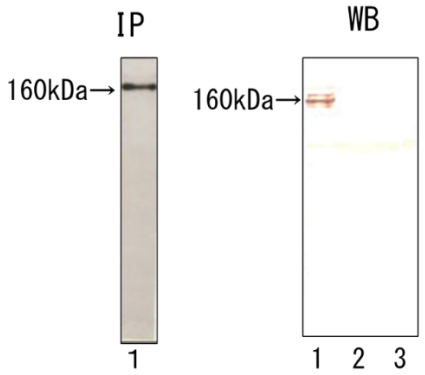

Fig.1. Immunoprecipitation (IP) and Western blotting (WB) of ATI-01 antibody.

IP: The lysate of CPV-infected RK13 cells (1) was immunoprecipitated with ATI-01 antibody and then with rabbit anti-mouse IgG and protein A. The immune complex was applied to SDS-PAGE. WB : The lysates of CPV- and VV-infected RK13 cells were applied to WB: (1) lysate of infected cells with CPV (LB red strain), (2) VV (Ikeda strain) and (3) VV (Lister strain). The antibody was used at 1/500 dilution. The HRP-conjugated goat anti-mouse IgG was used at 1/4,000 as the second antibody and visualized by DAB (3,3'-Diaminobenzidine). A protein band 160kDa correspond to the expected size of the A-type inclusions.

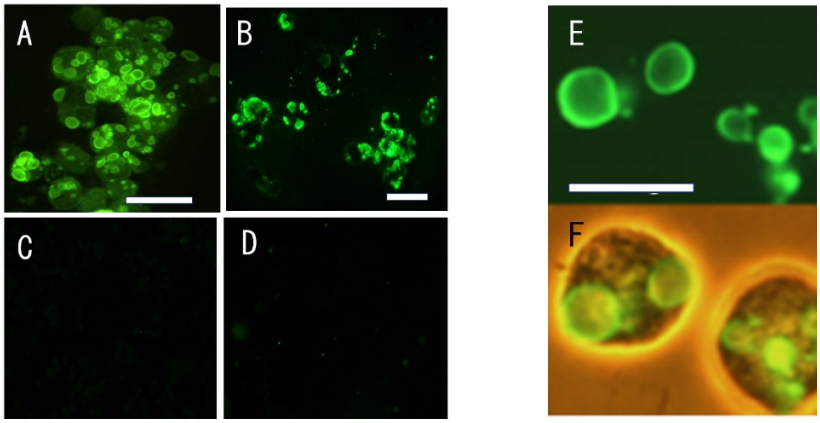

Fig.2. Immunofluorescence staining (IF) of CPV- and VV-infected RK13 cells with ATI-01 antibody.

CPV- and VV-infected RK13 cells on a slide glass were fixed with ethanol. (A) and (B) CPV-infected RK13 cells, (C) VV (Ikeda strain)-infected cells, (D) VV (Lister strain)-infected cells. (E) The IF micrograph and (F) represent the same area as the phase-contrast micrograph. The antibody was used at 1/400 dilution. The FITC-conjugated goat anti-mouse IgG was used at 1/4,000 as the second antibody. Bar maker represents 20 μ m.

References This antibody has not yet been used in publication.

Related products:

65-038 Anti-Vaccinia virus L1 protein (cross-reacts with Monkeypox virus), mouse monoclonal antibody (NP2)

65-039 Anti-Vaccinia virus L1 (neutralization), mouse monoclonal antibody (NP3)

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