

Anti-Measles virus nucleoprotein, mouse monoclonal antibody (MVN-01)

65-370 100 µg

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

Immunogen: Recombinant Measles virus nucleoprotein (aa 1 to 525) expressed in *E. coli*.

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

Purity: Protein A purified IgG2a κ

Reactivity: Measles virus nucleoprotein

Applications:

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

Background: Measles virus (MV) is an acute viral illness that can be complicated by severe pneumonia, diarrhea and encephalitis and is spread through respiration. MV is the prototypic member of the *Morbillivirus* genus of the family Paramyxoviridae. The viral genomic RNA is single-stranded, nonsegmented, and of negative polarity and encodes six major structural proteins: the nucleocapsid protein (NP), the phosphoprotein (P), the matrix protein (M), the fusion protein (F), the hemagglutinin protein (HA), and the large or polymerase protein (L). The NP (N, nucleoprotein) is a cytosolic protein and coated by a helical layer of the M. The NP binds only to viral genomic RNA and forms the helical ribonucleocapsid that serves as a template for viral replication. The NP is composed of 525 amino acid residues (60kDa), with two domains: NCORE (aa 1-400) and NTAIL (C-terminal domain, aa 401-525).

Data Link: UniProKB: [Q89933](#) · NCAP_MEASF (Edmonston B strain)
[P10050](#) · NCAP_MEASH (Halle strain)

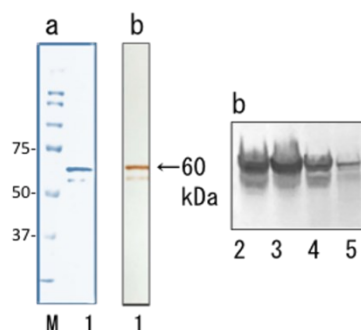


Fig.1. Western blot (WB) of MVN-01 antibody.

The recombinant MV NP and the lysates of MV-infected Vero/SLAM cells were applied to SDS-PAGE (a) and WB (b): (M) Marker, (1) recombinant MV NP, (2) MV vaccine strain (Schwarz) genotype A, (3) MV gM19-600 genotype D8, (4) MV gM19-1024 genotype B3, (5) MV C-170 genotype H1. The MVN-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 60kDa band was identified as MV NP.

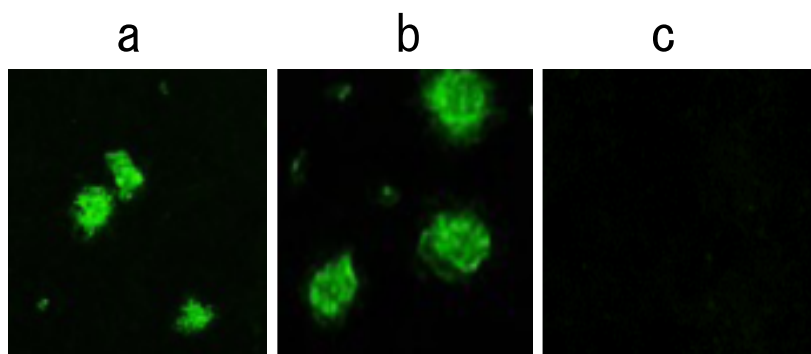


Fig.2. Immunofluorescence staining of MV NP in MV-infected cells (Vero/SLAM).

MV-infected and uninfected cells on a slide glass were fixed with ethanol. (a) MV vaccine strain (Schwarz, genotype A)-infected cells, (b) MV gM19-600 (genotype D8)-infected cells, (c) uninfected cells. The MVN-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.