

Anti-Human parainfluenza virus (HPIV) nucleoprotein (NP) antibody, mouse monoclonal (PINP-01)

Product code	65-180
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	Viral core fraction prepared from purified Human parainfluenza virus (HPIV type 3)
Isotype	mouse IgG2a κ
Reactivity	Reacts with the HPIV nucleocapsid protein (nucleoprotein, NP)
Validation	Specificity has been validated by western blotting
Application	1. Western blotting: x1/200-400 (Fig.1) 2. Immunofluorescence: x1/400 (Fig.2)
Background	Human Parainfluenza Virus Type 3 (HPIV-3), a non-segmented, negative-strand RNA virus, causes lower respiratory illness in newborns, infants and older people. The genome of HPIV-3 encodes at least six proteins: the nucleoprotein (NP), phosphoprotein (P), RNA-dependent RNA polymerase (L), matrix protein (M), and two virus-host cell interaction glycoproteins, fusion protein (F) and hemagglutinin-neuraminidase (HN). The polypeptide of these antigens was identified by immunoprecipitation, immunoblotting and several serological analyses. The P, HN, NP, F and M antigens have a molecular weight of 84kDa, 72kDa (572 a.a.), 68kDa (515 a.a.), 53kDa and 40kDa polypeptide, respectively. The NP was shown to be structurally related to the major nucleocapsid protein.
Data Link	UniProtKB : P06159 (NCAP_PI3H4)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 65-180 Anti-Human parainfluenza virus (HPIV) nucleoprotein (NP) antibody, mouse monoclonal (PINP-01)

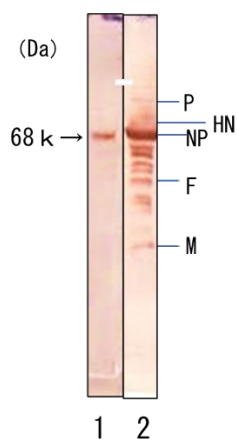


Fig.1. Identification of protein in HPIV-3 by Western blotting (WB)

Lane 1: HPNP-01 monoclonal antibody (MAb)

Lane 2: anti-HPIV-3 mouse serum

The virus purified from the culture supernatant of infected cells was applied to SDS-PAGE and WB. The MAb and antiserum were used at 1/ 200 and 1/400 dilution, respectively. The HRP-conjugated goat anti-mouse IgG was used at 1/2,000 as the second antibody and visualized by DAB (3,3'-Diaminobenzidine). A 68 kDa band was identified as HPIV NP.

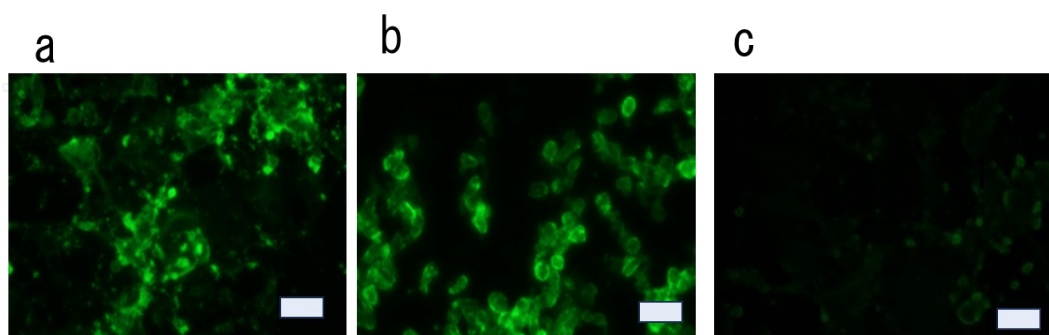


Fig.2. Detection of HPIV-3 protein infected in cells by immunofluorescence staining

(a)Vero cells were infected with HPIV on a slide glass and fixed with ethanol. (b) HPIV-infected Vero cells were treated with trypsin, smeared on the preparate and fixed with ethanol. (c) Uninfected Vero cells on a slide glass were fixed with ethanol. The MAb was used at 1/200 dilution. As the second antibody, FITC-conjugated rabbit anti-mouse IgG was used at 1/ 2,000 dilution. Bar maker represents 20µm.

References This antibody has not yet been used in publication.

Related product: 65-182 Anti-Human parainfluenza virus (HPIV) neutralizing antibody, mouse monoclonal (PIHN-01)