

Anti-Influenza B Virus Nucleoprotein antibody, mouse monoclonal (8C8)

65-170 100 µg

Background: Influenza virus nucleoprotein (NP) is a major component of the ribonucleoprotein complex and is abundantly expressed during the course of infection. It is a structural protein, which encapsidates the negative strand viral RNA and is essential for RNA transcription, replication and packaging. From the nucleotide sequence, NP consists of 560 amino acids with a calculated molecular mass of 61,770.

Post-translational modification: NP may be cleaved from a 56-kDa protein to a 53-kDa protein by a cellular caspase in infected cells. This cleavage may be a marker for the onset of apoptosis in infected cells or have a specific function in virus-host interaction.

Applications

1. Immunofluorescent and Immunocytochemical staining (1/100 dilution)
 2. Immunoprecipitation (1/100 dilution)
 3. ELISA (assay dependent)
- May not be suitable for Western blotting

Specification

Immunogen: Human Influenza B Virus strain Nagasaki/1/87, one of the strains of B/Victoria group

Reactivity: Reacted with NP of all Influenza B viruses so far tested (113 clinical strains), including Yamagata lineage strains Mie/1/1993, Johannesburg/5/1999, Florida/4/2006 and Victoria lineage strains Lee/1940, Gif/21/1973, Shangdong/7/1997, Malaysia/2506/2004, Massachusetts/2/2012
No cross reactivity with influenza A viruses.

Isotype: mouse IgG1, kappa

Product: Produced in serum-free medium and purified by proprietary chromatography procedure under mild conditions.

Form: 1 mg/ml in PBS, 50% glycerol, filter sterilized.

Storage: Shipped at 4°C or -20°C. Upon arrival, spin down and store at -20°C.

Data Link: UniProt/P04665 Influenza B virus nucleoprotein

References: This antibody was described and used in the following references.

Nakagawa N. et al. Rapid detection and identification of two lineages of influenza B strains with monoclonal antibodies. J Virol Methods. 1999;79:113-2 ICC, IP

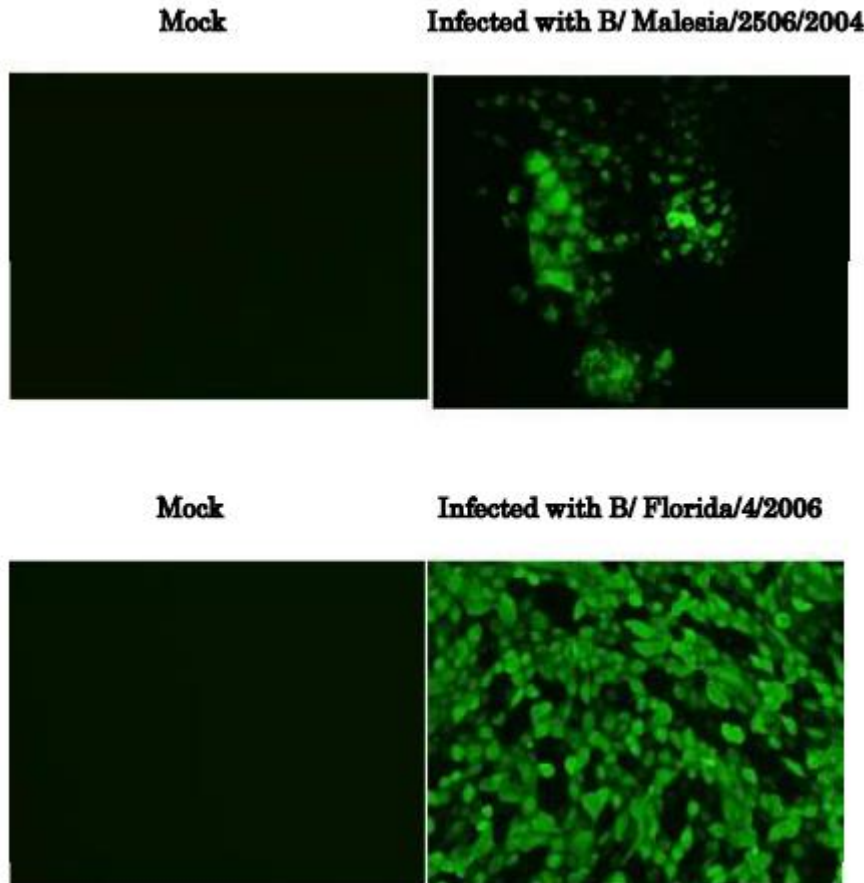


Fig.1 Immunofluorescence assay of MDCK (canine kidney) cells infected with Influenza B virus, using anti-Influenza B virus NP antibody (clone 8C8)

Samples were taken at 24 hours post-infection. Anti-Influenza B Virus NP antibody (clone 8C8) efficiently detected the viruses in the infected MDCK cells. The cells were fixed with 4% paraformaldehyde in phosphate-buffered saline (PBS) and permeabilized with 0.1% Triton X-100 in PBS. The bound antibody was visualized by a further reaction with an Alexa Fluor 488-conjugated secondary antibody. Images on the left are mock-infected MDCK cells as negative control. The cells infected with an Influenza B virus vaccine strain, Malaysia/2506/2004 of Victoria group is shown in the upper panel and Florida/4/2006 of Yamagata group in the lower panel.